

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 21, 2004, 06:36:06 ; Search time 40 Seconds
(without alignments)
942.924 Million cell updates/sec

Title: US-10-628-395-2
Perfect score: 1987
Sequence: 1 MDTIFLWLLLLFFGQASR.....FIMKHNPTESILFMGRVTNP 392

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR 79:*

- 1: pir1:*
- 2: pir2:*
- 3: pir3:*
- 4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	788.5	39.7	410	2 S70647	neuroserpin precu
2	728	36.6	191	2 S49162	ZG-21p protein - r
3	650	32.7	390	2 I38201	squamous cell carc
4	635	32.0	390	2 I38202	leupin precursor -
5	589	29.6	376	1 A48681	placental thrombin
6	586	29.5	388	1 DYCH	ovalbumin-related
7	577.5	29.1	379	2 A42421	leukocyte elastase
8	577	29.0	400	2 JC4265	plasminogen activa
9	575	28.9	397	2 I48717	proteinase inhibit
10	573.5	28.9	379	2 S27383	elastase inhibitor
11	570.5	28.7	402	1 A35032	plasminogen activa
12	569	28.6	378	2 A57488	proteinase inhibit
13	562.5	28.3	397	2 B27496	proteinase inhibit
14	561	28.2	378	2 S38962	serpin - pig
15	558	28.1	398	2 A37274	glia-derived nexin
16	558	28.1	402	1 S06745	plasminogen activa
17	555.5	28.0	402	1 A34761	plasminogen activa
18	553.5	27.9	418	2 JX0129	contrapsin precurs
19	552	27.8	418	2 S23675	contrapsin-related
20	548.5	27.6	397	2 I39184	bomapsin - human
21	547.5	27.6	391	2 JX7118	headpin serine pro
22	547	27.5	385	1 OACH	ovalbumin [validat
23	544.5	27.4	383	2 S11433	ovalbumin - Japane
24	544.5	27.4	464	1 AHHU3	antithrombin III p
25	537	27.0	465	2 I59611	antithrombin III -
26	535.5	27.0	418	1 S31507	serine proteinase
27	535	26.9	431	1 JX0364	antithrombin III -
28	533	26.8	374	2 A59273	proteinase inhibit
29	530	26.7	402	1 ITHU91	plasminogen activa

30	526.5	26.5	433	1 ITHUC	alpha-1-antichymot
31	524	26.4	465	1 S28219	antithrombin III p
32	523.5	26.3	408	2 A55533	intracellular coag
33	521	26.2	433	1 A61435	antithrombin III -
34	515.5	25.9	410	2 I50494	serine proteinase
35	515.5	25.9	415	2 A32853	plasminogen activa
36	514.5	25.9	413	2 JX0154	alpha-1-antiprotei
37	509.5	25.6	413	2 JX0267	alpha-1-antiprotei
38	507.5	25.5	413	2 A54968	alpha-1-antitrypsi
39	507	25.5	376	2 B59273	proteinase inhibit
40	506	25.5	408	2 S11320	serine proteinase
41	502.5	25.3	413	2 S54981	alpha-1-antiprotei
42	500.5	25.2	403	2 S08102	serine proteinase
43	499.5	25.1	417	2 S19724	kallikrein-binding
44	498	25.1	416	2 B29131	kallikrein-binding
45	494.5	24.9	359	2 D88940	protein C0584.1 [1

ALIGNMENTS

RESULT 1

S70647
neuroserpin precursor - chicken
C:Species: Gallus gallus (Chicken)
C>Date: 14-Feb-1997 #sequence_revision 13-Mar-1997 #text_change 09-Jul-2004
C:Accession: S70647; S77695
R:Osterwalder, T.; Contatases, J.; Stoeckli, E.T.; Kuhn, T.B.; Sonderegger, P.
EMBO J. 15, 2944-2953, 1996
A:Title: Neuroserpin, an axonally secreted serine protease inhibitor.
A:Reference number: S70647; MUID:96272154; PMID:8670795
A:Accession: S70647
A:Molecule type: mRNA
A:Residues: 1-410 <OSTL>
A:Cross-references: UNIPROT:Q90935; EMBL:Z71930; NID:gl359667; PIDN:CAA96493.1; PID:gl3
A:Experimental source: brain
A:Accession: S77695
A:Molecule type: protein
A:Residues: 17-40;243-257;288-293;309-317 <OST>
C:Superfamily: Serpin
C:Keywords: serine proteinase inhibitor
F:1-16/Domain: signal sequence #status predicted <SIG>
F:17-410/Product: neuroserpin #status experimental <MAT>

Query Match	39.7%	Score 788.5;	DB 2;	Length 410;
Best Local Similarity	40.0%;	Pred. No. 7.3e-45;		
Matches	158;	Conservative 92;	Mismatches 138;	Indels 7; Gaps 3;
QY	5	FLWSLLLLFFGQASRCSAQKNT--EPAVDLYQEVSLSHKD-NIIFSLGITLVLEWYQL	61	
DB	3	FLGLSLVLPSKAFKTNFPDPTTAELSVNYNQRAAREDENILFCPLSAIANGMLEL	62	
QY	62	GAKGKAAQOIQTLLKQETSAGSEFLVLKSFCSAISEKKQBFTFNLANALYLQEGTVKE	121	
DB	63	GAHGTTLKEIRHSLGDFSLKNGEEFTFLKDLSDMATTEESHVNLNMANSLVYQNGFHVSE	122	
QY	122	QYVHGNKFFFOSAIKLVDFQAKCAEMISTWVERKTDGKIDMFSGEGFPLRLVLVN	181	
DB	123	KFLQVKKYKAEVENIDFSQAAVATHINKWENHTNNMKDFVSSDFLSALTHLVIN	182	
QY	182	ATYFKGDMKQFRKEDTQLINFTKNGSTVKIPMMKALLRTKYGYSSESLN----	237	
DB	183	ALYFGNWKSKQRPENTRTFTSKDDETEVOIPMYQGEFYGEYFSGSNEAGGIYQL	242	
QY	238	ELSYKGDFFSLIILPAEGMDIEVEKILITAAQILKWLSEMOEVEEISLPRFKVEQKD	297	
DB	243	EIPYEGDISMMVLSRQEVPLVLEPLVKASLINEMANSVKQKVEYVLPRTFVEQID	302	
QY	298	FKDVLVSLNITIFSGGCDLSCITDSSSVYVSQVTKYQFFETNEDGSAASTGTHIPVI	357	
DB	303	LKDVLKGLGITVEFVSADLTAMSNKELIYAKAFHKAFLVNEEGSEAAASGMIAISR	362	
QY	358	MSLAQSQFIANHPFLFMKHNPTESILFMGRVTNP	392	

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Db
363 MAVLYPQVIVDHPFFFLVRNRRGTGTVLFMGRVMHP 397
|::| | | | | | | | | | | | | | | | | |

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RESULT 2

ZG-21p protein - rat
C-Species: Rattus norvegicus (Norway rat)
C-Date: 16-Feb-1995 #sequence_revision 12-May-1995 #text_change 09-Jul-2004
C-Accession: S49162
R: Cronsghagen, U.; Chen, C.; Kern, H.F.
submitted to the EMBL Data Library, March 1994
A-Description: A novel protein expressed exclusively in pancreas is proposed to be a serine protease.
A-Reference number: S49162
A-Accession: S49162
A-Status: preliminary
A-Molecule type: mRNA
A-Residues: 1-131 <CRO>
A-Cross-references: UNIPROT:Q63547; EMBL:Z30585; NID:G510193; PID:G5101
C-Superfamily: Serpin

Query Match	36.6%	Score 728;	DB 2;	Length 191;
Best Local Similarity	77.0%;	Pred. NO. 2.7e-41;		
Matches 137;	Conservative	22;	Mismatches 19;	Indels 0;
Gaps 0				

QY 215 MMKALRTKGYFSESSNYQVIELSYKGDERSHIIILPAEGMDIEEVEKLITAAQILKW 274

QY 275 LSEQBEVEEISLPRFKVEQKVDKDVLYSLNITEIFSGGCDLSGITDSEVWYSQVTQK 334

335 VFEINEDGSEAAATGCIHIPVIMSLAQSFIAHHFFIFIMKHNPTESTILFMGRVTNP 392

RESULT 3

138201 squamous cell carcinoma antigen 1 - human
C.Species: Homo sapiens (man)
C.Date: 23-Feb-1996 #sequence revision 23-Feb-1996 #text_change 09-Jul-2004
C.Accession: I38201: I38200: G01631; J00967: J00967
R.Schneider: S.S.; Schick, C.; Fish, K.E.; Miller, E.; Pena, J.C.; Treter, S.D.; Hui, S.
Proc. Natl. Acad. Sci. U.S.A. 92, 3147-3151, 1995
A.Title: A serine proteinase inhibitor locus at 18q21.3 contains a tandem duplication of
A.Reference number: I38200: MUID:95241462; PMID:7724531

A;Cross-references: GB:S66896; NID:g239551; PIDN:AAB20405.1; PID:g239552
 A;Accession: J0967
 A;Molecule type: protein
 A;Residues: 11-21;231-237;240-256;303-325 <SUM2>
 C;Comment: This antigen probably acts as a proteinase inhibitor to modulate the host imm
 C;Genetics:
 A;Gene: GDB:SCC1; SCC
 A;Cross-references: GDB:625364; OMIM:600517
 A;Map position: 18q21.3-18q21.3
 A;Introns: 5/3; 74/3; 117/3; 157/1; 204/3; 256/3
 C;Superfamily: Serpin
 C;Keywords: cysteine proteinase inhibitor; glycoprotein
 F.65.93.171.376/Binding site: carbohydrate (Asn) (covalent) #status predicted
 F.354/Inhibitory site: Ser (cathepsin L) #status predicted

Query Match 32.7%; Score 650; DB 2; Length 390;
Best Local Similarity 35.1%; Pred. No. 9.9e-36;
Matches 138: Conservative 90; Mismatches 135; Indels 30; Gaps 6;

Qy	23	AQKNT	FAVD	LQYEV	SLSHK	DNIF	SP	LGIT	LV	EMV	Q	LG	K	G	K	A	Q	Q	I	R	T	L	K	Q	E	T	S	-	81																							
		:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:																								
Db	5	SEANT	K	F	M	D	L	F	Q	O	R	K	S	K	E	N	N	F	G	P	I	S	I	T	S	A	L	G	M	V	L	L	G	A	K	N	T	A	C	O	I	K	V	L	H	F	D	O	V	T	E	64

QY 82 -----AGEEFLVKSFCSAISEKKQEFTFNLANALYQEGFTVREQLHGK 138

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QY      129 EFFQAIKLVDFQDA-KACAEMISTWVERTDCKIKDMFSGEEFGPITRLVLNAIYFKG 187
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QY 188 DWQKQFKERKEDTQLINFTKNGSTVKIPMMKALLRTXYGYFCESSLNVOVLISYKGDFFS 247

185 QWEXKFNKEDTKEEXFPWPNNTYKSIQMROY - TSPHFASLEDVQAKVLEIPYKKGOLS 242

db 243 MIVLPNEIDGLQLEKLTAEKLNWTSQNMRRETVDLHLPFKVEESYDLKDTLRM 302

306 NITETSGGCDLSG1TDSSEVVVSQVTKVFEEINDEGSEAASTGTGHPVMTSLAOS -- 363

RESULT 4

leupin precursor - human
Accession: U01001
138202
Alternate names: proteinase inhibitor 11 (PI11); squamous cell carcinoma antigen 2
C.Species: Homo sapiens (man)
C.Date: 23-Feb-1996 #sequence revision 23-Feb-1996 #text_change 15-Sep-2003
C.Accession: 138202; S66675; S57522
R.C.Schneider, S.S.; Schick, C.; Fish, K.E.; Miller, E.; Pena, J.C.; Treter, S.D.; Hui, S.
Proc. Natl. Acad. Sci. U.S.A. 92, 3147-3151, 1995
A.Title: A serine proteinase inhibitor locus at 18q21.3 contains a tandem duplication of
A.Reference number: 138200; MUID:95241462; PMID:7724531
A.Accession: 138202
A.Status: nucleic acid sequence not shown
A.Molecule type: DNA
A.Residues: 1-330 <SCH>
A.Cross-references: EMBL:U19576; GB:U19569; NID:g852456
R.Barnes, R.C.; Worrall, D.M.
FEBS Lett. 373, 61-65, 1995
A.Title: Identification of a novel human serpin gene; cloning sequencing and expression
A.Reference number: S66675; MUID:96013887; PMID:7589435
A.Accession: S66675
A.Molecule type: mRNA
A.Residues: 7-351, 'V', 353-394 <BAR>
A.Cross-references: EMBL:X89015; NID:g887464; PIDN:CAA61420.1; PID:g887465
C.Genetics:

A:Gene: GDB:SCA2; P111
A:Cross-references: GDB:636556; OMIM:600518
A:Map position: 18q21.3-18q21.3
A:Introns: 55/3; 74/3; 117/3; 157/1; 204/3; 256/3
C:Superfamily: Serpin
C:Keywords: glycoprotein; serine proteinase inhibitor
F:1-22/Domain: signal sequence #status predicted <SIG>
F:23-384/Product: leupin #status predicted <MAT>
F:45, 93, 170, 376/Binding site: carbohydrate (Asn) (covalent) #status predicted
F:354/Inhibitory site: Leu (unidentified proteinase) #status predicted

Query Match 32.0%; Score 635; DB 2; Length 390;
Best Local Similarity 35.0%; Pred. No. 9.7e-35;
Matches 138; Conservative 90; Mismatches 134; Indels 32; Gaps 7;

QY 23 AOKNTEFAVDLYQEVSLSHKDNIFSPGLGTLVLEMVQLGAKGAKQAQQIQTQLKQOETS- 81
DB 5 SEANTKEMFDLFQOPKSKENNIFYPISITSLGNVLGAKDNTAQQLSKVLHFDQVTE 64
QY 82 -----AGBEFLVLSFCSAISEKKQ---EFTFNLANALYQEGTVKEQVYHGNK 128
DB 65 NTTEKAATYHVDKSGNVHGFQKLLTFEFNKSTDAYELKIANKLFGKTYQFLQEVYDAIK 124
QY 129 EFQSAIKLVDFODA-KACAEMISTWVERKTDGKIADMESGEEFGLTLVLVNAIYFKG 187
DB 125 KFYQTSVESTDFANAESEKKNVSWVESQTNKEIKNLPFDGTIGNDTLVLVNAIYFKG 184
QY 188 DMQKQFRKEDTQLINFTKNGSTVKIPMMKALLRTKYGVSFESSL---NYQVLELSYKGD 244
DB 185 QWENKPKKENTKEEKFPNKNTYKVSQMMR-----QVNSFNPFALLEVDQAKVLEIYKGGK 239
QY 245 EFLSIILPAGMDIEVEKLITAAQILKW--LSEMQEEVEISLPRKVEQKVDPKDVL 302
DB 240 DLSMIVLLPNEIDGLQLEKLAELKMEWTSQNNRETCDVJHLPRFKVESYDULKYL 299
QY 303 YSLNITEIFSGGDLGITDSSEVVSQVTKQVFFNEEDGSEAAATSTGIHIPVIMSLA- 361
DB 300 RTMGWNIPLNGDADLSQWTHSHGLSVSKVLHKAFAVEVBEGVAAAATAV---VVFELSS 356
QY 362 ---QSQFIANHPFLFMKHNPTESILFMGRVTNP 392
DB 357 PSTNEEPCNHPFLFFIRQNKNTSILFYGRFSSP 390

RESULT 5
A48681
N:Alternate names: cytoplasmic antiproteinase; intracellular serine proteinase inhibitor
C:Species: Homo sapiens (man)
C:Date: 07-Apr-1994 #sequence revision 07-Jul-1995 #text change 09-Jul-2004
C:Accession: A48681; A54352; A46672; B46672; C46672; S35750
R:Coughlin, P.; Sun, J.; Cerruti, L.; Salem, H.H.; Bird, P.
Proc. Natl. Acad. Sci. U.S.A. 90, 9417-9421, 1993
A:Title: Cloning and molecular characterization of a human intracellular serine proteinase
A:Reference number: A48681; MUID:94022386; PMID:8415716
A:Accession: A48681
A:Molecule type: mRNA
A:Residues: 1-376 <COU>
A:Cross-references: UNIPROT:P35237; GB:Z22658; NID:G297411; PIDN:CAA80373.1; PID:G297412
A:Experimental source: placenta
A:Note: authors translated the codon CAA for residue 198 as Gly
R:Morgerstein, K.A.; Sprecher, C.; Holth, L.; Foster, D.; Grant, F.J.; Ching, A.; Kisiel
Biochemistry 33, 3432-3441, 1994
A:Title: Complementary DNA cloning and kinetic characterization of a novel intracellular
A:Reference number: A54352; MUID:94183847; PMID:8136380
A:Accession: A54352
A:Molecule type: mRNA
A:Residues: 1-174, 'E', 176-361, 'S', 363-376 <MOR>
A:Cross-references: GB:S69272; NID:G546087; PIDN:AAB30320.1; PID:G546088
A:Experimental source: placenta
A:Note: sequence extracted from NCBI backbone (NCBIN:145231, NCBI:P:145232)
R:Coughlin, P.B.; Tetaz, T.; Salem, H.H.
J. Biol. Chem. 268, 9541-9547, 1993

A:Title: Identification and purification of a novel serine proteinase inhibitor.
A:Reference number: A46672; MUID:93252826; PMID:8486644
A:Accession: A46672
A:Molecule type: protein
A:Residues: 47-60; 63-81; 91-98 <CO2>
A:Experimental source: placenta, leukemic cell line K562
A:Note: sequence modified after extraction from NCBI backbone
C:Genetics:
A:Gene: GDB:PI6
A:Cross-references: GDB:252025; OMIM:173321
A:Map position: 6p25-6p24.3
C:Superfamily: Serpin
C:Keywords: blocked amino end; cytosol; serine proteinase inhibitor
F:341/Inhibitory site: Arg (thrombin) #status predicted

Query Match 29.6%; Score 589; DB 1; Length 376;
Best Local Similarity 35.4%; Pred. No. 1e-31;
Matches 135; Conservative 85; Mismatches 141; Indels 20; Gaps 9;

QY 23 AOKTEFAVDLYQEVSLSHKDNIFSPGLGTLVLEMVQLGAKGAKQAQQIQTQLKQOETS 82
DB 5 AEANGTFALNLLKTLGKDNKSNVFFSPMSALAMVYMGAKGNTAAQMAQILSFNKS 64
QY 83 GEEFLVLKSFCSAISEKKQ---EFTFNLANALYQEGTVKEQVYHGNKGFQSAIKLVD 139
DB 65 GGD--IHQGFQSLTEVNTGTQVLLRVANRLFGKSCDFLSSPRSDCQKPYQAEMLD 122
QY 140 FQDA-KACAEMISTWVERKTDGKIADMESGEEFGLTLVLVNAIYFKGDMKQKFRKEDT 198
DB 123 FISAVEKSRKHNTWAEKTEGKTAELLSQGSVDPLTRLVLVNAVYFGWWDGQFKENT 182
QY 199 QLIINPTKNGSTVKIPMMKALLRTKYGVSFESSLNYQVLELSYKGDFFSLIILPAEGMD 258
DB 193 EERLFLKVSKEEKPQMMFKQSTFKTVIG-IFTQILVLPYVGKELNMIILPDETDD 240
QY 259 IEEVEKLITAAQILKW--LSEMQEEVEISLPRKVEQKVDPKDVLVSLNITEIFS-GGC 315
DB 241 LRTVEKELTYKFEWTRLDMDDEEVEVSLPRKLESYDMESVLRNLGMDTDAFELCKA 300
QY 316 DLSGITDSSEVVSQVTKQVFFNEEDGSEAAATSTGIHIPVIMSLAQSQFI---ANHPP 371
DB 301 DESGMS-QTDLSLSKVHKSFEVNEEGTEAAATA---AIIIMRCARFVPRFCADHPF 355
QY 372 LFIMKHNPTEISILFMGRVTNP 392
DB 356 LFFIQHRTKNGILFCGRFSSP 376

RESULT 6
DYCH
N:Albumin-related Y protein - chicken
C:Species: Gallus gallus (chicken)
C:Date: 17-Dec-1982 #sequence revision 17-Dec-1982 #text change 09-Jul-2004
C:Accession: A01244
R:Heilig, R.; Maraskowsky, R.; Kloepfer, C.; Mandel, J.L.
Nucleic Acids Res. 10, 4363-4382, 1982
A:Title: The ovalbumin gene family: complete sequence and structure of the Y gene.
A:Reference number: A01244; MUID:83014329; PMID:7122240
A:Accession: A01244
A:Molecule type: DNA
A:Residues: 1-388 <HEI>
A:Cross-references: UNIPROT:P01014; GB:J00922; GB:V00439; NID:G212899; PIDN:AAA68882.1.
C:Genetics:
A:Introns: 56/3; 73/3; 116/3; 156/1; 203/3; 255/3
C:Superfamily: Serpin
C:Keywords: glycoprotein; phosphoprotein; serine proteinase inhibitor
F:74-121/Disulfide bonds: #status predicted
F:293/Binding site: carbohydrate (Asn) (covalent) #status predicted
F:345/Binding site: phosphate (Ser) (covalent) #status predicted

Query Match 29.5%; Score 586; DB 1; Length 388;
Best Local Similarity 32.5%; Pred. No. 1.7e-31;
Matches 125; Conservative 95; Mismatches 143; Indels 22; Gaps 9;

QY 26 NTEFAVDLYQEVSLSH-KONTIFSPGLITLVLEWVQVIGAKGAKQAOQIROTLK-QQETSAG 83
 DB 8 NAKPCFDVFNEMKVHHVNNENTLYCPLSILTALAMVYLARGNTESQMKVLFHDSITGAG 67
 QY 84 -----EPLF--VLKSPCSAISSEKKQETFNLANALYLQEGFTVKEQYVHLGNKEFFQ 132
 DB 68 STDSQCGSSBYVHNLKELLSEITRNWATYSLEADKLIVDKTFSVPLPSTCARFYT 127
 QY 133 SAIKLVDQD-AKACAEMISTWVERKTGDKIKOMF--SGBEFGPLTRVLVNAIYFKGDW 189
 DB 128 GGVBEVNFKTAABEARQLINSWEKETNGQIKOLLVSSIDFG--TTWVFINTIYFKGIW 195
 QY 190 KOKERKEDTOLINTKNGSTVTKIPMKALLRTKYGFSESSLYQVLELSYKGDSESLI 249
 DB 186 KIANTEDTRMPPFSMTYKESKPQVM--CMNNSFNVTLPAAKMKILELPYASGDLML 243
 QY 250 IILPAEGMDIEVEKLITAOQILKWL--EMQBEVEEISLPRFKVEQKVDKDVLYSLNI 307
 DB 244 VLLPDEVSGLERIEKTINFDKLEWTSTNAVAKSKMKVLPRLMKIEKYNLTSLMALGM 303
 QY 308 TEIISGCDLSGIDSSEVVSVQVTKVFEINDEGSEATSTGIHIPVIMSLAQSOPTIA 367
 DB 304 TDLSRSANLTGSSVDNLMISDAVHGVMVEAEGTEATGSTGAIGNIKHLSLEBEFRA 363
 QY 368 NHPFLFMKHNPTESILFMGRVTNP 392
 DB 364 DHPFLFIRYNPTNAILFFGRYNSP 388
 RESULT 7
 A42421
 leukocyte elastase inhibitor - horse
 N:Alternate names: plasminogen activator inhibitor-2 homolog
 C:Species: Equus caballus (domestic horse)
 C:Date: 04-Mar-1993 #sequence, revision 18-Nov-1994 #text_change 09-Jul-2004
 C:Accession: A42421; A37276; S34062
 R:Dubin, A.; Travis, J.; Enghild, J.J.; Potempa, J.
 J. Biol. Chem. 267, 6576-6583, 1992
 A:Title: Equine leukocyte elastase inhibitor. Primary structure and identification as a
 A:Reference number: A42421; MUID:92202200; PMID:1551869
 A:Accession: A42421
 A:Status: preliminary
 A:Molecule type: protein
 A:Residues: 1-379 <DUB1>
 A:Cross-references: UNIPROT:P05619; PIDN:AAB21885.1; PID:G247842
 A:Experimental source: leukocyte
 A:Note: sequence extracted from NCBI backbone (NCBIP:89849)
 R:Dubin, A.; Travis, J.; Enghild, J.J.; Potempa, J.
 submitted to the Protein Sequence Database, December 1991
 A:Reference number: A37276
 A:Accession: A37276
 A:Molecule type: protein
 A:Residues: 1-41,'E',43-325,'VD',326-379 <DUB2>
 R:Kordula, T.; Dubin, A.; Schooltink, H.; Koj, A.; Heinrich, P.C.; Rose-John, S.
 Biochem. J. 293, 187-193, 1993
 A:Title: Molecular cloning and expression of an intracellular serpin: an elastase inhibitor
 A:Reference number: S34062; MUID:93319507; PMID:7687128
 A:Accession: S34062
 A:Status: preliminary
 A:Molecule type: mRNA
 A:Residues: 1-379 <KOR>
 A:Cross-references: GB:M91161; NID:g164240; PIDN:AAA97513.1; PID:g164241
 C:Superfamily: Serpin
 C:Keywords: serine proteinase inhibitor

Query Match 29.1%; Score 577.5; DB 2; Length 379;
 Best Local Similarity 35.5%; Pred. No. 6e-31;
 Matches 135; Conservative 86; Mismatches 138; Indels 21; Gaps 10;

QY 26 NTEFAVDLYQEVSLSHK---NIISPLGITLVLEWVQVIGAKGAKQAOQIROTLKQOETS 82
 DB 8 NTHFAVDLPR--ALNESDPTGNIFISPLSISALAMIFLGTGNTAAQVSKAL--YEDTV 63

QY 83 GEEFLVLKSFCSAISSEKKQETFNLANALYLQEGFTVKEQYVHLGNKEFFQSAIKLVDFQD 142
 DB 64 EDIHSRFSQNLADINKPGAPYLKLANLYGKTYNPLADFLASTQKMYGSELASVDFQ 123
 QY 143 AKACA-EMISTWVERKTGDKIKOMF--SGBEFGPLTRVLVNAIYFKGDWQKFRKEDTQI 201
 DB 124 APEDARKSEINWVGQTEGKPELLVKGWDMNTKLVLVNAIYFKGNQWQEKMEATRDA 183
 QY 202 NF--TKNGSTVKIPMKALLRTKYGFSESSLYQVLELSYKGDSESLIILP---AE 255
 DB 184 PRLNKKTKVK--WYQKKKFPYNYED--LKRVLLELPYQKELSMILLDDIDE 239
 QY 256 GMDIEVEKLITAOQILKWL--SEMQBEEVEISLPRFKVEQKVDKDVLYSLNTEIFS- 312
 DB 240 STGLEKIEKQTLLEKLEWTXPNLYLAENVNHLPRFKLEBSYDLTSHLARLGVQDLFNR 299
 QY 313 GGCDSLGSITDSSEVVSVQVTKVFEINDEGSEATSTGIHIPVIMSLAQSOFTANHPFL 372
 DB 300 GKADLSGMSGARDLVFKLIHKSFDLNEEGTEAAATAGTILMLAMPSENFADHPFI 359
 QY 373 FIMKHNPTESILFMGRVTNP 392
 DB 360 FFIRHPSANILFLGRFSSP 379
 RESULT 8
 JC4265
 plasminogen activator inhibitor type 1 precursor - American mink
 C:Species: Mustela vison (American mink)
 C:Date: 19-Oct-1995 #sequence, revision 08-Feb-1996 #text_change 09-Jul-2004
 C:Accession: JC4265
 R:Chuang, T.H.; Hamilton, R.T.; Nilsen-Hamilton, M.
 Gene 162, 303-308, 1995
 A:Title: Cloning of the mink plasminogen activator inhibitor type-1 messenger RNA: An mr
 A:Reference number: JC4265; MUID:96032362; PMID:7557448
 A:Accession: JC4265
 A:Molecule type: mRNA
 A:Residues: 1-400 <CHU>
 A:Cross-references: UNIPROT:P50449; EMBL:X58541; NID:g1164923; PIDN:CAA41433.1; PID:g116
 A:Experimental source: lung CDU4 epithelial cells
 C:Comment: This protein controls the activities of the plasminogen activators and plasm
 C:Genetics:
 A:Gene: pai-1
 C:Superfamily: Serpin
 C:Keywords: glycoprotein; plasminogen activator; serine proteinase inhibitor
 F:1-21/Domain: signal sequence #status predicted <SIG>
 F:22-400/Product: plasminogen activator inhibitor type 1 #status predicted <MAT>
 F:230,286,350/Binding site: carboxylate (Asn) (covalent) #status predicted
 F:367/Inhibitory site: Arg (plasminogen activator) #status predicted
 Query Match 29.0%; Score 577; DB 2; Length 400;
 Best Local Similarity 33.6%; Pred. No. 6.9e-31;
 Matches 137; Conservative 81; Mismatches 164; Indels 26; Gaps 8;

QY 1 MDITFWSLLLLLFFGSOASRC-----SAQNTFAVDLYQEVSLSHK-NIISPLGITL 54
 DB 3 MSTVCLALGLALVFGASASLYLHETRAELATDFGVKFKVAQAQSKDRNMVFSYGLAS 62
 QY 55 VLEWVOLGAKGKAAQOIROTLLKQETSAGEEFLVLKSPCSAISSEKKQEF-----TFNL 107
 DB 63 VLAMQLQTAGEFRQIQAMRFQ-----IDEKGMAPALRQLYKELMGWPNWDEIST 114
 QY 108 ANALYQEGFTVKEQYVHLGNKEFFQSAIKLVDFQDAKACAEIMSTWVERKTGDKIKDMFS 167
 DB 115 ADAIFVQRDLKLVHGFWPFFRLFTTVKQVDFSEVERARFIINDWVKSHTKGMIGDLG 174
 QY 168 GEEFGPLTRVLVNAIYFKGDWQKFRKEDTQIINFTKNGSTVKIPMKALLRTKYGF 227
 DB 175 RGVVDQTRLMLVNAIYFNGWQKTPPKSGTHHRLFKHKSDDGSTVSPVPMMAQNKFNFTF 234
 QY 228 S-ESSLNYQVLELSYKGDSESLIILPAE-GMDIEVEKLITAOQILKWLSEMQBEVEI 285

Db 235 STPEGRYDILEPVGHTLSMFIAAPYEKDVPLSALTNLIDLAQLISQWKGNNTRRLRL 294
Qy 286 SLRPFKEQKVDKDVLYSLNITEIF-SGGCDLSGTDSEVYVSQVTKVFEINEDGS 344
Db 295 VLPKFSLESEVNLGRPLENIGMTDMFRPNQADFSLSQDEALYSQALOKVLEINESGT 354
Qy 345 EAATSTGIHIPVMSLAQSOFIANHPFLFMKHNPTESILFMGRVTNP 392
Db 355 VASSSTAILVSARM--APEIINDRPFLLFVRHNPTGTVLFGQVMEP 400
RESULT 9
I48717
proteinase inhibitor nexin I precursor - mouse
C:Species: Mus musculus (house mouse)
C>Date: 02-Jul-1996 #sequence revision 02-Jul-1996 #text_change 09-Jul-2004
C:Accession: I48717; S70772; S55731
C:Vassalli, J.D.; Huarte, J.; Bosco, D.; Sappino, A.P.; Velardi, A.; Wohlwe
EMBO J. 12, 1871-1878, 1993
A:Title: Protease-nexin I as an androgen-dependent secretory product of the murine semin
A:Reference number: I48717; MUID:93259128; PMID:8491179
A:Accession: I48717
A:Status: preliminary; translated from GE/EMBL/DBD
A:Molecule type: mRNA
A:Residues: 1-397 <RES>
A:Cross-references: UNIPROT:Q07235; EMBL:X70296; NID:G551064; PIDN:CAA49777.1; PID:G5510
A:Accession: S70772
A:Status: nucleic acid sequence not shown; translation not shown
A:Molecule type: DNA
A:Residues: 1-86 <AS>
A:Cross-references: EMBL:X70946; NID:G57930; PIDN:CAA50285.1; PID:G57931
A:Note: the nucleotide sequence was submitted to the EMBL Data Library, February 1993
C:Genetics:
C:Superfamily: Serpin
C:Keywords: serine proteinase inhibitor
C:Keywords: signal sequence #status predicted <SIG>
F:20-397/Product: proteinase inhibitor nexin I #status predicted <NAT>
Query Match 28.9%; Score 575; DB 2; Length 397;
Best Local Similarity 33.4%; Pred. No. 9.3e-31;
Matches 134; Conservative 93; Mismatches 152; Indels 22; Gaps 10;
Qy 1 MDTFLWSLLLLFPQSQASCSAQK-NTEPAVDLYQEVSLSH-KDNIIFPLGTLVLEM 58
Db 10 LTTVTLYSV-----HSQFNLSLBLEGSNTGIVQFNQIKSRPHENVVSPHGIASLGM 64
Qy 59 VOLGAKGAQOOIRQTLKQOETSAGEEFLVKSFCSAISKKQOEFTEFNALANALYLOEGFT 118
Db 65 LQLGADGTTKQLSTVMRYNVGVK---VLKTKNKALVSKONKDIYTVANAVFLRNGFX 121
Qy 119 VKEQYLHGNKEFFQSAIKLVDFQAKACAEMISTWVERKTDGKIKMFSGEFP-GPLTRL 177
Db 122 MEVPAVRKDVQCEVQVNFQDPASASESINFVKNETRGMDINLLSPNLIDGALTRL 181
Qy 178 VLVNVALYKGDWKQKFRKEDQLINFTKNGSTVKIPMKALLRTKYGYP-SESSLYNQV 236
Db 182 VLVNVALYKGLWKSFPQESTKKTFTVAGDGKSLQVPMALQSLVFRSGSRTTPNGLWYF 241
Qy 237 IELSYKGFDFSLIILPAE-GMDIEVEKLITAOQILKWLSEMQUEEVEISLPRFKVEQK 295
Db 242 IELPYHGESISMLIALPTESSTPLSAIPIHTTKTIDSWMTVMVPMKMLVLPKFTAVAQ 301
Qy 296 VDFKDVLYSLNITEIFS-GGCDLSGTDSEVYVSQVTKVFEINEDGSEAASTGTGHI 354
Db 302 TDLKEPLKALGITEFEPFSKANFTKITRSESLHSHLQKAKIEVSEDDGKASAAST---- 357
Qy 355 FVMSLAQSQ---FIANHPFLFMKHNPTESILFMGRVTNP 392
Db 358 -TAILIARSSPWFIVDRPFLESIRHNPFTGAILFLGQVYKP 397
RESULT 10

S27383
elastase inhibitor - human
C:Species: Homo sapiens (man)
C>Date: 13-Jan-1995 #sequence revision 13-Jan-1995 #text_change 09-Jul-2004
C:Accession: S27383; S65750
R:Remold-O'Donnell, E.; Chin, J.; Alberts, M.
Proc. Natl. Acad. Sci. U.S.A. 89, 5635-5639, 1992
A:Title: Sequence and molecular characterization of human monocyte/neutrophil elastase
A:Reference number: S27383; MUID:92302296; PMID:1376927
A:Accession: S27383
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-379 <REM>
A:Cross-references: UNIPROT:P30740; EMBL:M93056
R:Packard, B.Z.; Lee, S.S.; Remold-O'Donnell, E.; Komoriya, A.
Biochim. Biophys. Acta 1269, 41-50, 1995
A:Title: A serpin from human tumor cells with direct lymphoid immunomodulatory activity
A:Reference number: S65750; MUID:96049524; PMID:7578269
A:Accession: S65750
A:Status: preliminary
A:Molecule type: protein
A:Residues: 57-69; 97-110; 111-129; 204-213; 216-244; 255-271; X' 273-274; 291-301 <PAC>
C:Genetics:
A:Gene: GDB:ELANH2; BI: P12
A:Cross-references: GDB:132914; OMIM:130135
A:Map position: 6p25-6p24.3
C:Superfamily: Serpin
C:Keywords: serine proteinase inhibitor
Query Match 28.9%; Score 573.5; DB 2; Length 379;
Best Local Similarity 34.9%; Pred. No. 1.1e-30;
Matches 132; Conservative 86; Mismatches 143; Indels 17; Gaps 9;
Qy 26 NTEPAVDLYQEVSLSH-KDNIIFPLGTLVLEMVQLGAKGAKQOOIRQTLKQOETSAGE 84
Db 8 NTRFALDLFLALSENPNPAGNIFISPFSSSAMAVFLGTRGNNTAAQLSKTF--HPTNVEE 65
Qy 85 EFLVLKSCSAISEKKQOEFTEFNALANALYLOEGFTVKEOYLHGNKEFFQSAIKLVDFQDAK 144
Db 66 VHSRFQSLNADINKGASYILKLANLYGEKTYNPLPFLYSTQKTYGADLASVDFOHAS 125
Qy 145 ACA-EMISTWVERKTDGKIKMFSGEFPGLTRLVLNVALYKGDWKQKFRKEDQLINF 203
Db 126 EDARXTINGVKQGTGEGKIPPELLAGSMVDNMTKLVNVALYKGNWKQKFKKATNAPP 185
Qy 204 --TKNGSTVKIPMKALLRTKYGYPFBSSLYNQVLELSYKGFDFSLIILP----AEGM 257
Db 186 RLNKDKRKTVK--MMYQKKFAFYGTED--LKRVLIELPYQGEELSWILLPDDIEDST 241
Qy 258 DIEVEKLITAOQILKWL--SEMQUEEVEISLPRFKVEQKVDKDVLYSLNITEIF-SGG 314
Db 242 GLKKIEEQTLLEKLHEWTKPENLDIEVNVSLPRFLEESYTLNSDLARLGVQDLFNSSK 301
Qy 315 CDLSGTDSEVYVSQVTKVFEINEDGSEAASTGTGHIHPVMSLAQSOFIANHPFLFI 374
Db 302 ADLSGMSGARDIFISKIVHKSEVYNEEGTEGTAATAATAGIATFCMLMPEENFTADHPFLFF 361
Qy 375 MKHNPTESILFMGRVTNP 392
Db 362 IHNSSGSLFLGRSSP 379
RESULT 11
A35032
plasminogen activator inhibitor 1 precursor - rat
C:Species: Rattus norvegicus (Norway rat)
C>Date: 10-Sep-1999 #sequence revision 10-Sep-1999 #text_change 09-Jul-2004
C:Accession: A35032; J0490; A60581; A39120
R:Brudzinski, C.J.; Riordan-Johnson, M.; Nordby, E.C.; Suter, S.M.; Gehrter, T.D.
J. Biol. Chem. 265, 2078-2085, 1990
A:Title: Isolation and characterization of the rat plasminogen activator inhibitor-1 ge
A:Reference number: A35032; MUID:90130456; PMID:2298740
A:Accession: A35032

A:Molecule type: DNA
 A:Residues: 1-402 <BRU>
 A:Cross-references: UNIPROT:P20961; GB:J05206; NID:G205965; PIDN:AAA1796.1; PID:G205966
 R:Zehnb, R.; Gelehrter, T.D.
 Gene 73, 459-468, 1988
 A:Title: Cloning and sequencing of cDNA for the rat plasminogen activator inhibitor-1.
 A:Reference number: J70490; MUID:89211983; PMID:3149611
 A:Accession: J70490
 A:Molecule type: mRNA
 A:Residues: 1-402 <ZEH>
 A:Cross-references: GB:M24067; NID:G577500; PIDN:AAA56856.1; PID:G577501
 R:Newman, M.J.; Lane, E.A.; Iannotti, A.M.; Nugent, M.A.; Pepinsky, R.B.; Keski-Oja, J.
 Endocrinology 126, 2936-2946, 1990
 A:Title: Characterization and purification of a secreted plasminogen activator inhibitor on in transformed NRK cells.
 A:Reference number: A60581; MUID:90276328; PMID:2190800
 A:Accession: A60581
 A:Molecule type: protein
 A:Residues: 24-48 <NEW>
 R:Olson Jr., J.A.; Shiverick, K.T.; Ogilvie, S.; Bui, W.C.; Raizaga, M.K.
 Proc. Natl. Acad. Sci. U.S.A. 88, 1928-1932, 1991
 A:Title: Angiotensin II induces secretion of plasminogen activator inhibitor 1 and a tissue inhibitor of metalloproteinases from endothelial cells.
 A:Reference number: A39120; MUID:91156719; PMID:2000398
 A:Accession: A39120
 A:Status: preliminary
 A:Molecule type: protein
 A:Residues: 24-43, 'G' <OLS>
 C:Genetics:
 A:Introns: 91/1; 169/1; 234/1; 300/2; 334/1; 363/1; 391/1
 C:Superfamily: Serpin
 C:Keywords: Glycoprotein
 F:1-23/Domain: signal sequence #status predicted <SIG>
 F:24-402/Product: plasminogen activator inhibitor-1 #status experimental <MAT>
 F:88,232,288,352/Binding site: carbohydrate (Asn) (covalent) #status predicted
 F:369/Inhibitory site: Arg (plasminogen activator) #status predicted

Query Match 28.7%; Score 570.5; DB 1; Length 402;
 Best Local Similarity 33.4%; Pred. No. 1.9e-30;
 Matches 133; Conservative 83; Mismatches 171; Indels 11; Gaps 7;
 QY 3 TIFLWSLLLPFGSQASRC----SAQKNTEFAVDLYQVLSLHKD-NIIFPLGIGTLVLE 57
 Db 8 TCLTLGLVLFVGKGFASPLPESHTAQOATNFGVKVQHVVQASQKDNVFPSPGVSSVLA 67
 QY 58 MVQLGAKGKAQQIROTLLKQOETSAGBEFLVLKSFCSAISSEKQKQETFFNLNLYLQEGF 117
 Db 68 MLQUTTAGKTRQIQDAMGFNIGERGTG-PALRKLKSLKMGSWNKNEISTADAIFVQDL 126
 QY 118 TVKEQYLHGKPEFQSAIKLVDFQDAKACAEIMSTWERTDGIKDMFSGEEFGPLTLL 177
 Db 127 ELVQGFPHFPLFRITVKQDSEVERARFIINDWERTKGMISOLLAKGAVNELRL 186
 QY 178 VLNVNLYFKGDWKQKFKEDPTQLNFTKNGSTVKIPMKALLRTKYGYF-SESSLNLYQV 236
 Db 187 VLNVNLYFNGQWKTPELEASTHQRLFKSDGSIISVPMQAQNNKFNYTEFTPDGHEYDI 246
 QY 237 LEYSYKGDSESLIILPAE-GMDIEVEKLIITAQQLKWLSEMQEVEEISLPRFKVEQK 295
 Db 247 LELPYHGETUSMFIAPFEKVDPLSATNILDDELIRQWNNRTPRLILLIPKFSLETE 306
 QY 296 VDFKDLVLSNITEIFSG-CCDLSGTSSEVVVSQVTKVFFNEINDEGSEATSTGIHI 354
 Db 307 VDLRGLPEKLGMDTIFSSQTQDFTSLSDQELSLVAQALQVKVKNESGTVASSSTAILV 366
 QY 355 PVVMSLAQSOFIANHPLFLTMKNPTESILFMGRVTNP 392
 Db 367 SARML--APTEMVLDRSFLFVVRHNPTETILFMGQLMEP 402

RESULT 12

A57488

C:Species: Mus musculus (house mouse)

A:Title: Functional sites of glia-derived nexin (GDN): importance of the site reacting w

A:Reference number: A34538

A:Accession: A34538

A:Status: preliminary

C:Date: 08-Dec-1995 #sequence_revision 08-Dec-1995 #text_change 09-Jul-2004
 C:Accession: A57488
 R:Sun, J.; Rose, J.B.; Bird, P.
 J. Biol. Chem. 270, 16089-16096, 1995
 A:Title: Gene structure, chromosomal localization, and expression of the murine homologu
 A:Reference number: A57488; MUID:95332310; PMID:7608171
 A:Accession: A57488
 A:Status: preliminary
 A:Molecule type: mRNA
 A:Residues: 1-378 <SUN>
 A:Cross-references: UNIPROT:Q60854; GB:U25844; NID:G818902; PIDN:AAA79684.1; PID:G818903
 C:Genetics:
 A:Gene: Spi3
 A:Map position: 13
 A:Superfamily: Serpin
 C:Keywords: serine proteinase inhibitor
 F:343/Inhibitory site: Arg (unidentified proteinase) #status predicted

Query Match 38.6%; Score 569; DB 2; Length 378;
 Best Local Similarity 33.6%; Pred. No. 2.2e-30;
 Matches 126; Conservative 82; Mismatches 159; Indels 8; Gaps 4;
 QY 24 QKNTEFAVDLYQVLSLHKDNIIFSPGLITLVLEWVQLGAKGKAQQIROTLLKQOETS-- 81
 Db 6 EANGTFALNLLKILGEDSSKNVFLSPMSISSALAMVFMGAKGTTASQMAQALALDKSGN 65
 QY 82 -AGEEFLVLKSFCSAISSEKQKQETFFNLNLYLQEGFTVKEQYLHGKPEFQSAIKLVDF 140
 Db 66 GGDVHQGFQSLLTVEVNTQYLLRTANRLFGDKTCDLLASFKDSCLKFYAELELDF 125
 QY 141 QDA-KACAEIMSTWERTDGIKDMFSGEEFGPLRLVLNLYFKGDWKQKFKREDTQ 199
 Db 126 QGATEESQCHINTVAKTKEDKIEVLSPGVNSDTSVLVNLVNYFKGNWEKQFNKEHTR 185
 QY 200 LINTKNGSTVKIPMKALLRTKYGYFSSSLNLYQVLELSYKGDSESLIILPAEGMDI 259
 Db 186 EMPFKVSKNEEKPVQMMFKKSTFTQTYIGE--IFTKILLPYVSSLENNIIMLPDEHVEL 243
 QY 260 EIVEKLITAQQLKWL--LSEMQEVEEISLPRFKVEQKDFKDLVLSNITEIFSGGCDL 317
 Db 244 STVEKVTYKFIETWRLDKMDEEVEVFLPKFLENNYNNNDALYKLGWTDAGGRADF 303
 QY 318 SGITDSEVVVSQVTKVFFNEINDEGSEATSTGIHIPIVMSLAQSOFIANHPLFLMKH 377
 Db 304 SGMSKQGLFLSKYVHKAFVEVNEEGTEAAATAGMTVRCMRTPTPRFCADHPFLPFIH 363
 QY 378 NPTEILFMGRVTNP 392
 Db 364 VKTNGILFCGRFSSP 378

RESULT 13
 B27496
 proteinase inhibitor nexin 1 precursor - rat (fragment)
 N:Alternate names: glia-derived nexin (GDN)
 C:Species: Rattus norvegicus (Norway rat)
 C:Date: 30-Jun-1988 #sequence_revision 30-Jun-1988 #text_change 09-Jul-2004
 A:Accession: B27496; A34538; A42351; B42351; C42351
 R:Sommer, J.; Gloer, S.M.; Rovelli, G.F.; Hofsteenge, J.; Nick, H.; Meier, R.; Monard, D
 Biochemistry 26, 6407-6410, 1987
 A:Title: cDNA sequence coding for a rat glia-derived nexin and its homology to members o
 A:Reference number: A90519; MUID:88107544; PMID:3427015
 A:Accession: B27496
 A:Molecule type: mRNA
 A:Residues: 1-397 <SOM>
 A:Cross-references: UNIPROT:P07092; GB:M17784; NID:G204283; PIDN:AAA41209.1; PID:G204284
 A:Note: the authors translated the codon TGG for residue 156 as Thr
 R:Nick, H.; Hofsteenge, J.; Shaw, E.; Rovelli, G.; Monard, D.
 Biochemistry 29, 2417-2421, 1990
 A:Title: Functional sites of glia-derived nexin (GDN): importance of the site reacting w
 A:Reference number: A34538; MUID:90248459; PMID:2337608
 A:Accession: A34538
 A:Status: preliminary

A:Molecule type: protein
A:Residues: 364-394 <NIC>
R:Rovelli, G.; Stone, S.R.; Guidolin, A.; Sommer, J.; Monard, D.
Biochemistry 31, 3542-3549, 1992
A:Title: Characterization of the heparin-binding site of glia-derived nexin/protease nexin
A:Reference number: A42351; MUID:92207980; PMID:1554734
A:Accession: A42351
A:Molecule type: protein
A:Residues: 82-96 <ROV1>
A:Note: sequence extracted from NCBI backbone (NCBIP:93846)
A:Accession: B42351
A:Molecule type: protein
A:Residues: 165-178 <ROV2>
A:Note: sequence extracted from NCBI backbone (NCBIP:93851)
A:Accession: C42351
A:Molecule type: protein
A:Residues: 317-333 <ROV3>
A:Note: sequence extracted from NCBI backbone (NCBIP:93856)
A:Note: peptide sequences were determined from rat cDNA cloned and expressed in yeast
C:Superfamily: Serpin
C:Keywords: glycoprotein; serine proteinase inhibitor
F:1-20/Domain: signal sequence #status predicted <SIG>
F:21-397/Product: proteinase inhibitor nexin 1 #status predicted <NAT>
F:159/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 28.3%; Score 562.5; DB 2; Length 397;
Best Local Similarity 33.2%; Pred. No. 6.2e-30;
Matches 128; Conservative 91; Mismatches 150; Indels 17; Gaps 9;

QY 16 SQASRCQAOK-NTEPAVDLYQEVSLSH-KDNILFSPGLITLVLEWVQLGAKGAQOQIRQ 73
DB 20 SOLNSLSLEELGSDTGQVFNQIYKSPHENVVISPHGIASILGNLQLGADGRYTKQLST 79
QY 74 TLKQETSAGSEFLVLFSCSAISEKQOEFNFANALYIQBGTVKVEQYVHLHGKFFQS 133
DB 80 VMRYNNGVGK--VLKINKALVSKKMDIVTVANAVFRNGPKVEVPAARNKEVFQC 136
QY 134 AIKLVDQDAKACAEIMSTWERTDGIKDMFSGEFP-GPLFLVLVNAIYFKGDWKQK 192
DB 137 EVQSNFQDPAACDAINFVKNTRGMIDNLSPTIDLSALTCLVLVNAVYFKGLWKS 196
QY 193 FRKEDTOLINTKNGSTVKIPMKALLRTKYGVF-SESSLYNQVLSYKGBDFSLIIL 251
DB 197 FQPNYTKRTFVAGDGKSYQVPMALQSLVFRSGSTKTPNGLWYNFIELPHGESISMLIA 256
QY 252 LPAE-GMDIEVEKLIITAQILKMLSEMOEVEEISLPRFKVEQKVPKQVLSLNTIEI 310
DB 257 LPTESSTPLSAIIPHISTKTINSWMNTWPKRMOLVLPKFTALAQTDLKEPLKALGITM 316
QY 311 FS-GGCDLSGTDSEVVSQVTKVPEINEDGSEATSTGHIHPVMSLAQSQ---FI 366
DB 317 PEPSKANKFTRSESLVSHILQAKIEVSEDGKAAVTVT-----TAILIARSPFWFI 371

QY 367 ANHPFLFMKHNPTESILFMGRVTNP 392
DB 372 VDRPFLFCIRHNPTGAILFLGQVKNF 397

RESULT 14
S38962
serpin - pig
C:Species: Sus scrofa domestica (domestic pig)
C:Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 15-Sep-2003
C:Accession: S38962
R:Reschauer, W.F.; Mentale, R.; Sommerhoff, C.P.
Eur. J. Biochem. 217, 519-526, 1993
A:Title: Primary structure of a porcine leukocyte serpin.
A:Reference number: S38962; MUID:94039085; PMID:7901009
A:Accession: S38962
A>Status: Preliminary
A:Molecule type: protein
A:Residues: 1-378 <RES>
A:Note: the sequence from Fig. 6 is inconsistent with that from Fig. 5 in having 256-Asn

C:Superfamily: Serpin
Query Match 28.2%; Score 561; DB 2; Length 378;
Best Local Similarity 32.7%; Pred. No. 7.3e-30;
Matches 126; Conservative 97; Mismatches 130; Indels 32; Gaps 11;

QY 26 NTEPAVDLYQEVSLSH-KDNILFSPGLITLVLEWVQLGAKGAQOQIRQTLKQETSAGE 84
DB 8 NTRPALDLFRALNESNPAGNIFISPFSSALAMILLGTRGNTAEQMSKAL----- 58
QY 65 EFLVLK-----SPCSAISSEKQOEFNFANALYIQBGTVKVEQYVHLHGKFFQSAILK 137
DB 59 HEDTVKDIHSRFSQSLNADINKGASIIKLKLANRLEGEKTYHFLPEFLASTQKTYGAELAS 118
QY 138 VDF-QDAKACAEIMSTWERTDGIKDMFSGEFPGLITLVLEWVQLGAKGAQOQIRQTLKQETSAGE 196
DB 119 VDFLRASBEARKAINEWKTEQTEKIPPELLASGVVDSATKLVLVNAIYFKSGWQEKFMTE 178
QY 197 DTQLINF--TKNGSTVKIPMKALLRTKYGVFSESSLYNQVLSYKGBDFSLIILP- 253
DB 179 ATKDAPFLRNKDSKTVK--MMYQKKFPFGIKK--LKCRVLELQYQKGLSMVILLPD 234
QY 254 ---AEGMDIEVEKLIITAQILKML--SEMGEVEEISLPRFKVEQKVDVFXDVLVSLNIT 308
DB 235 STIEDSTGLRKIEQHLTLEKLRWTKPDNLELLELVNHLPRFLEESYDLNAPLARLGQV 294
QY 309 EIFSGCDLSGTDSEVVSQVTKVPEINEDGSEATST-GHIHPVMSLAQSQFIA 367
DB 295 DLFGSRADLTGMSAEDLFISKVHKSFVEVNEEGTAAATXGIADV-FAMLMPEEDFIA 353
QY 368 NHHPFLFMKHNPTESILFMGRVTNP 392
DB 354 DHPFFIFRHNPSNILLFLGRSSP 378

RESULT 15
A37274
Glia-derived nexin I precursor, splice form beta - human
N;Alternate names: glia-derived neurite promoting factor; proteinase inhibitor 7; prote
N;Contains: glia-derived nexin I precursor, splice form alpha
C:Species: Homo sapiens (man)
C:Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text_change 09-Jul-2004
C:Accession: A37274; J00010; A27496; A26061; A24051
R:McGrogan, M.; Kennedy, J.; Li, M.P.; Hsu, C.; Scott, R.W.; Simonsen, C.C.; Baker, J.B.
Bio/Technology 6, 172-177, 1988
A:Title: Molecular cloning and expression of two forms of human protease nexin I.
A:Reference number: J00010
A:Molecule type: mRNA
A:Accession: A37274
A:Residues: 1-398 <MCG1>
A:Cross-references: UNIPROT:P07093
A:Experimental source: splice form beta
A:Accession: J00010
A:Molecule type: mRNA
A:Residues: 1-328, 'R', 331-398 <MCG2>
A:Experimental source: splice form alpha
R:Sommer, J.; Gloor, S.M.; Rovelli, G.F.; Hofsteenge, J.; Nick, H.; Meier, R.; Monard, J.
Biochemistry 26, 6407-6410, 1987
A:Title: cDNA sequence coding for a rat glia-derived nexin and its homology to members
A:Reference number: A90519; MUID:88107544; PMID:3427015
A:Accession: A27496
A:Molecule type: mRNA
A:Residues: 1-328, 'R', 331-398 <SOM>
A:Cross-references: GB:M17783; NID:g183063; PIDN:AAA35883.1; PID:g183064
R:Gloor, S.; Odink, K.; Guenther, J.; Nick, H.; Monard, D.
Cell 47, 687-693, 1986
A:Title: A glia-derived neurite promoting factor with protease inhibitory activity belo
A:Reference number: A26061; MUID:87051740; PMID:2877744
A:Accession: A26061
A:Molecule type: protein
A:Residues: 1-259, 'S', 261-398 <GLO>
R:Scott, R.W.; Bergman, B.L.; Baijap, A.; Hersh, R.T.; Rodriguez, H.; Jones, B.N.; Barr
J. Biol. Chem. 260, 7029-7034, 1985

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OM protein - protein search, using sw model

Run on: October 21, 2004, 06:33:26 ; Search time 193 Seconds
(without alignments)
1168.637 Million cell updates/sec

Title: US-10-628-395-2
Perfect score: 1987
Sequence: 1 MOTIFLSLLLFQSQASR.....FIMKINPTESILFMGRVTNP 392

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Uniprot 02: *
1: uniprot_sprot: *
2: uniprot_treml: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1972	99.2	405	1 SPI2 HUMAN	O75830 homo sapien
2	1524	76.7	405	1 SPI2 MOUSE	O9JX88 mus musculus
3	828.5	41.7	410	2 O6GUT7	O6G1T7 xenopus lae
4	791.5	39.8	410	1 NEUS HUMAN	O95574 homo sapien
5	788.5	39.7	410	1 NEUS_CHICK	O30935 gallus gall
6	762.5	38.4	410	1 NEUS_RAT	O9JID2 rattus norv
7	762.5	38.4	410	2 AAH61536	AAH61536 rattus no
8	757.5	38.1	410	1 NEUS MOUSE	O35684 mus muscu
9	757.5	38.1	410	2 BAC27727	BAC27727 mus muscu
10	757.5	38.1	410	2 BAC34756	BAC34756 mus muscu
11	728	36.5	191	2 O63547	O63547 rattus norv
12	649	32.7	390	1 SCC3 HUMAN	P29508 homo sapien
13	649	32.7	390	2 AAP35394	OAP35394 homo sapi
14	647	32.6	390	2 O86W04	O86W04 homo sapien
15	640	32.2	390	2 O81X13	O81X13 homo sapien
16	636	32.0	390	1 SCC2 HUMAN	P48594 homo sapien
17	634	31.9	407	2 O6HA07	O6HA07 branchiosto
18	627	31.6	390	2 O86W05	O86W05 homo sapien
19	623	31.4	390	2 O86W03	O86W03 homo sapien
20	618.5	31.1	369	2 O9BYF7	O9BYF7 homo sapien
21	615.5	31.0	387	2 O8BHL1	O8BHL1 mus muscu
22	614.5	30.9	387	2 O6UKZ2	O6UKZ2 mus muscu
23	614.5	30.9	387	2 O9D105	O9D105 mus muscu
24	614.5	30.9	387	2 AAR89288	AAR89288 mus muscu
25	611.5	30.8	379	2 O9D154	O9D154 m mus muscu
26	611	30.7	384	2 O6TGU1	O6TGU1 brachydanio
27	611	30.7	384	2 AAQ97848	AAQ97848 brachydano
28	609.5	30.7	379	2 O8BK60	O8BK60 mus muscu
29	609.5	30.7	379	2 O9D758	O9D758 mus muscu
30	608.5	30.6	387	2 O8BG86	O8BG86 mus muscu
31	608.5	30.6	387	2 AAH63756	AAH63756 mus muscu

32	604	30.4	378	1 PTI6 BOVIN	O02739 bos taurus
33	604	30.4	388	2 Q9Z2G2	Q9Z2G2 mus musculus
34	603.5	30.4	377	2 O08804	O08804 mus musculus
35	603.5	30.4	377	2 AAH61050	AAH61050 mus muscu
36	603.5	30.4	405	1 SB12 HUMAN	O96P63 homo sapien
37	595	29.9	409	2 Q7Z2Y7	O7Z2Y7 homo sapien
38	594	29.9	376	1 PTI6 HUMAN	P35237 homo sapien
39	588	29.6	392	2 AAH69596	AAH69596 homo sapi
40	587	29.5	392	1 SB11_HUMAN	Q96P35 homo sapien
41	586	29.5	388	1 OVAY_CHICK	P01014 gallus gall
42	579.5	29.2	379	2 O6P8U0	O6P8U0 rattus norv
43	579.5	29.2	379	2 AAH60594	AAH60594 rattus no
44	578.5	29.1	387	2 O6UKZ0	O6UKZ0 mus musculus
45	578.5	29.1	387	2 AAR89290	AAR89290 mus muscu

RESULT 1
SPI2_HUMAN
ID SPI2_HUMAN STANDARD; PRT; 405 AA.
AC O75830;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Serpin I2 precursor (Myoepithelium-derived serine protease inhibitor)
DE (Pancpin) (Protease inhibitor 14) (TSA2004).
DE Name=SERPINI2; Synonyms=PI14, MEPI;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=9287625; PubMed=9624529;
RA Ozaki K., Nagata M., Suzuki M., Fujiwara T., Miyoshi Y., Ishikawa O.,
RA Ohigashi H., Imacka S., Takahashi E., Nakamura Y.;
RT "Isolation and characterization of a novel human pancreas-specific
RT gene, pancpin, that is down-regulated in pancreatic cancer cells."
RL Genes Chromosomes Cancer 22:179-185(1998).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=9919247; PubMed=10097100;
RA Xiao G., Liu Y.E., Gentz R., Sang Q.A., Ni J., Goldberg I.D.,
RA Shi Y.E.;
RT "Suppression of breast cancer growth and metastasis by a serpin
RT myoepithelium-derived serine proteinase inhibitor expressed in the
RT mammary myoepithelial cells."
RL Proc. Natl. Acad. Sci. U.S.A. 96:3700-3705(1999).
RN [3]
RP SEQUENCE FROM N.A.
RC TISSUE=Pancreas, and Spleen;
RX MEDLINE=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Sherman C.M., Schuler G.D.,
RA Altshul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Boraldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Ustin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S.G., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettman M., Madan A.C., Shevchenko Y., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Crimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA Scherch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.";

ALIGNMENTS

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RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
CC -!- SUBCELLULAR LOCATION: Secreted (Probable).
CC -!- TISSUE SPECIFICITY: Expressed in pancreas and adipose tissues.
CC -!- SIMILARITY: Belongs to the serpin family.
CC -----
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CC -----
DR EMBL; AB006423; BAA33766.1; -.
DR EMBL; AF130470; AAD34723.1; -.
DR EMBL; BC027859; AAB27859.1; -.
DR HSP; P05120; IJRR.
DR GenBank; HGNC:8945; SERPINI2.
DR MIM; 605587; -.
DR GO; GO:0004867; F:serine-type endopeptidase inhibitor activity; TAS.
DR GO; GO:0006928; P:cell motility; TAS.
DR InterPro; IPR000215; Prot_inh_serpin.
DR Pfam; PF00079; Serpin; 1.
DR SMART; SM00093; SERPIN; 1.
DR PROSITE; PS00284; SERPIN; 1.
KW Glycoprotein; Serine protease inhibitor; Serpin; Signal.
FT SIGNAL 1 18
FT CHAIN 19 405
FT SITE 357 358
FT CARBOHYD 202 202
FT CARBOHYD 207 207
FT CARBOHYD 306 306
FT CARBOHYD 306 306
SQ SEQUENCE 405 AA; 46145 MW; 5BA18C60E4FDE9A4 CRC64;

Query Match. 99.2%; Score 1972; DB 1; Length 405;
Best Local Similarity 99.5%; Pred. No. 5.6e-125;
Matches 390; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 MDIFLWSLLLPFGSQARCSAQKNTFAVDLYQEVLSHKDNIIFSPGLTIVLEWVQ 60
Db 1 MDIFLWSLLLPFGSQARCSAQKNTFAVDLYQEVLSHKDNIIFSPGLTIVLEWVQ 60
QY 61 LGAKGAQOQIROTLLKQOETSAGEEFLVLKSPCSAISEKKQEFNFANALYLQEGFTVK 120
Db 61 LGAKGAQOQIROTLLKQOETSAGEEFLVLKSPCSAISEKKQEFNFANALYLQEGFTVK 120
QY 121 EQLHGNGKEFFQSAIKLVDFQDAKACAEIMSTWVERKTGKIDKMPSEEFGLTFLVLV 180
Db 121 EQLHGNGKEFFQSAIKLVDFQDAKACAEIMSTWVERKTGKIDKMPSEEFGLTFLVLV 180
QY 181 NAIYFGDKWKQPKREDTQILNFTKNGSTVKIPMKALLRTKYGFSESSLYQVLELS 240
Db 181 NAIYFGDKWKQPKREDTQILNFTKNGSTVKIPMKALLRTKYGFSESSLYQVLELS 240
QY 241 YKDEFSLLIILPAEGMDIIEVEKLITAOQILKWLSEMOEEVEISLPRFKVEQKVDKFD 300
Db 241 YKDEFSLLIILPAEGMDIIEVEKLITAOQILKWLSEMOEEVEISLPRFKVEQKVDKFD 300
QY 301 VLYSLNITIFSGGCDLSGITDSSEYVYVQVTKVFFFEINEDGSAATSTGHIPIVMSL 360
Db 301 VLYSLNITIFSGGCDLSGITDSSEYVYVQVTKVFFFEINEDGSAATSTGHIPIVMSL 360
QY 361 AQSQFIANHPFLFMKHNPTESILFNGRVNTP 392
Db 361 AQSQFIANHPFLFMKHNPTESILFNGRVNTP 392

RESULT 2
SP12_MOUSE
ID SP12_MOUSE STANDARD; PRT; 405 AA.
AC Q9JKB8; Q9JKB23; Q9D955;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)

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DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Serpin I2 precursor (Serine protease inhibitor 14).
GN Name=SerpinI2; Synonyms=Sp14;
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Pancreas;
RA Chang W.S., Lin C.C., Wu C.W.;
RT "Isolation and characterization of mouse pancreas-specific serpin
gene.";
RL Submitted (MAR-2000) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Pancreas;
EX MEDLINE=22354683; PubMed=12466851; DOI=10.1038/nature01266;
RA Okazaki Y., Furuno M., Kasukawa T., Adachi J., Bono H., Kondo S.,
RA Nikaide I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H.,
RA Yagi K., Tomaru Y., Hasegawa Y., Nogami A., Schonbach C., Gojobori T.,
RA Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J.,
RA Schriml L.M., Kanapin A., Matsuda H., Batalov S., Beisel K.W.,
RA Blake J.A., Bradt D., Brusic V., Choithia C., Corbani L.E., Cousins S.,
RA Dalla E., Dragani T.A., Fletcher C.P., Forrest A., Frazer K.S.,
RA Gasterland T., Gariboldi M., Gissi C., Godzik A., Gough J.S.,
RA Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
RA Kanai A., Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L.,
RA Konagaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
RA Maglott D.R., Maltais L., Marchionni L., McKenzie L., Miki H.,
RA Nagashima T., Numata K., Okido T., Pavan W.J., Pertea G., Pesole G.,
RA Petrowsky N., Pillai R., Pontius J.U., Qi D., Ramachandran S.,
RA Ravasi T., Reed J.C., Reed D.J., Reid J., Ring B.Z., Ringwald M.,
RA Sandelin A., Schneider C., Sempie C.A., Setou M., Shimada K.,
RA Sultana R., Takenaka Y., Taylor M.S., Teasdale R.D., Tomita M.,
RA Verardo R., Wagner N., Wahlstedt C., Wang Y., Watanabe Y., Wells C.,
RA Wilming L.G., Wyshaw-Boris A., Yanagisawa M., Yang I., Yang L.,
RA Yuan Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N.,
RA Hirozane-Kishikawa T., Konno H., Nakamura M., Sakazume N., Sato K.,
RA Shiraki T., Waki K., Kawai J., Aizawa K., Arakawa T., Fukuda S.,
RA Hara A., Hashizume W., Imotani K., Ishii Y., Itoh M., Kagawa I.,
RA Miyazaki A., Sakai K., Sakai K., Shibata K., Shinagawa A.,
RA Yasunishi A., Yoshino M., Waterston R., Lander E.S., Rogers J.,
RA Birney E., Hayashizaki Y.;
RT "Analysis of the mouse transcriptome based on functional annotation of
60,770 full-length cDNAs.";
RL Nature 420:563-573(2002).
CC -!- SUBCELLULAR LOCATION: Secreted (Probable).
CC -!- TISSUE SPECIFICITY: Expressed in pancreas.
CC -!- SIMILARITY: Belongs to the serpin family.
CC -----
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CC -----
DR EMBL; AF251276; AAP65821.1; -.
DR EMBL; AK007347; BAB24976.1; -.
DR EMBL; AK007510; BAB25079.1; -.
DR HSP; P01008; IATH.
DR MGD; MGI:1915181; SerpinI2.
DR InterPro; IPR000215; Prot_inh_serpin.
DR Pfam; PF00079; Serpin; 1.
DR PROSITE; PS00284; SERPIN; 1.
KW Glycoprotein; Serine protease inhibitor; Serpin; Signal.
FT SIGNAL 1 18
FT CHAIN 19 405
FT SITE 357 358
FT CARBOHYD 306 306
FT CARBOHYD 306 306
FT CONFLICT 5 5
I -> M (in Ref. 2; BAB25079).

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FT CONFLICT 195 195 K -> T (in Ref. 2; BAB24976).
FT CONFLICT 207 207 D -> S (in Ref. 2; BAB24976).
FT CONFLICT 218 218 KYPMMKA -> RVPTEDEV (in Ref. 2; BAB24976).
FT CONFLICT 246 246 F -> Y (in Ref. 2; BAB24976).
SQ SEQUENCE 405 AA; 45775 MW; 04DF38BE8545DFA8 CRC64;

Query Match 76.7%; Score 1524; DB 1; Length 405;
Best Local Similarity 75.5%; Pred. No. 1e-94;
Matches 296; Conservative 40; Mismatches 56; Indels 0; Gaps 0;

QY 1 MDPIFWSLLLLFFGQASRCQAQKNTFAVDLYQVSLSHKDNIFSPGLGTLVLEVMQ 60
DB 1 MKNTILWSFLLPFGSGTGRATDQKIADFAVDLYKAISLSHKNNIFSPGLGTMLLGMVQ 60

QY 61 LGAKGAQAOIQRLTKQQTSAAGEEFLVLKSCFSAISEKKQEFFTNLANALYLOQGFVTK 120
DB 61 LGAKGAQAOIQRLTKQQTSAAGEEFLVLKSCFSAISEKKQEFFTNLANALYLOQGFVTK 120

QY 121 EQVLHGNKEFFQSAIKLVDPQDAKACAEIMSTWERTKDGKIDMPFSGEFGPLRLVLV 180
DB 121 ETVLHGNKEFFQSAIKLVDPQDAKACAEIMSTWERTKDGKIDMPFSGEFGPLRLVLV 180

QY 181 NAIYFGDKWKQKPRKEDTQINFTKXGSTVKIPMKALLRTKYGYFSSSLNYQVLELS 240
DB 181 NAIYFGDKWKQKPRKEDTQINFTKXGSTVKIPMKALLRTKYGYFSSSLNYQVLELS 240

QY 241 YKDEFSLLIILPAEGMDIEVEKLIITAQILKWLSEMQEEVEISLPRFKVQKVDKFD 300
DB 241 YKDEFSLLIILPAEGMDIEVEKLIITAQILKWLSEMQEEVEISLPRFKVQKVDKFD 300

QY 301 VLXSLNITEIFSGGCDLSGTDSEVYVSQVTKVFFNEINDEGSEAAATSTGHIPIVMSL 360
DB 301 VLXSLNITEIFSGGCDLSGTDSEVYVSQVTKVFFNEINDEGSEAAATSTGHIPIVMSL 360

QY 361 AQSOFTANHPFLFMKHNPTESILFMGRVTNP 392
DB 361 AQSOFTANHPFLFMKHNPTESILFMGRVTNP 392

RESULT 3
ID Q6GLT7 PRELIMINARY; PRT; 410 AA.
AC Q6GLT7;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DE Hypothetical protein.
OS Xenopus laevis (African clawed frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Mesobatrachia; Pipidea; Pipidae;
OC Xenopodinae; Xenopus.
OX NCBI_TaxID=8355;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=22388257; PubMed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,
RA Bobak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettelman M., Madan A., Rodriguez S., Sanchez A.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Krzywinski M.I., Skalska U., Smalusz D.E., Schnerch A., Schein J.E.,
RA Jones S.J., Marra M.A.;
```

```
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=22341132; PubMed=12454917;
RA Klein S.L., Strausberg R.L., Wagner L., Pontius J., Clifton S.W.,
RA Richardson P.;
RT "Genetic and genomic tools for Xenopus research: The NIH Xenopus
RT initiative.";
RL Dev. Dyn. 225:384-391(2002).
RN [3]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX Klein S., Strausberg R.;
RA submitted (JUN-2004) to the EMBL/GenBank/DBJ databases.
CC -!- SIMILARITY: Belongs to the serpin family.
DR EMBL; BC074366; AAH74366.1; -.
DR InterPro; IPR000215; Prot_inh_serpin.
DR Pfam; PF00079; Serpin; 1.
DR SMART; SM00093; SERPIN; 1.
DR PROSITE; PS00284; SERPIN; 1.
DR Hypothetical protein; Protease inhibitor; Serine protease inhibitor;
KW Serpin.
SQ SEQUENCE 410 AA; 46392 MW; 1C53BAF8D3F72480 CRC64;

Query Match 41.7%; Score 828.5; DB 2; Length 410;
Best Local Similarity 42.0%; Pred. No. 9.5e-48;
Matches 166; Conservative 95; Mismatches 123; Indels 11; Gaps 4;

QY 6 LWSLLL---LFGSQASRCQAQKNTFAVDLYQVSLSHKDNIFSPGLGTLVLEVMQ 61
DB 6 LLSLLVMQALVFGTSVHDAV---NEFSIKYVHELKATKEDENIFSPLSAIALGMVEL 62

QY 62 GAKGAQAOIQRLTKQQTSAAGEEFLVLKSCFSAISEKKQEFFTNLANALYLOQGFVTK 121
DB 63 GARGSSLEIRHLVGLYDKLNGEESFLKDLSSLTAEQKHVYLSIANSLYLOQGFHISD 122

QY 122 QYLHGNKEFFQSAIKLVDPQDAKACAEIMSTWERTKDGKIDMPFSGEFGPLRLVLV 181
DB 123 KFIQLMKKYKAEVENVDFSGSAVASHINLWENVHTNRIIDLFTADDNNLTKLVLN 182

QY 182 AIYFGDKWKQKPRKEDTQINFTKXGSTVKIPMKALLRTKYGYFSSSLN---YQVL 237
DB 183 ALYFKNWKSQRPENTFTFTKDDSEVQIPMMYQKGEFYGEFTDGSNEAGGVYQVL 242

QY 238 ELSYKGFDFSLIILPAEGMDIEVEKLIITAQILKWLSEMQEEVEISLPRFKVQKVD 297
DB 243 ELPYEGEISLIILSRQEVPLATIEPLLKAPLEEWANSVKQKQVEVYLPFRKVEEVN 302

QY 298 FKDVLYSLNITEIFSGGCDLSGTDSEVYVSQVTKVFFNEINDEGSEAAATSTGHIPIV 357
DB 303 LKXILMLRLGITKIFSGEADLSAISDSKDLFVAKVVKHKSFLVNEEGEAAASGMIANSR 362

QY 358 NSLAQSOFIANHPFLFMKHNPTESILFMGRVTNP 392
DB 363 MAVLYPQIVVDHPFFFLIRNRKGTGSLVFMGRVMP 397

RESULT 4
ID NEUS_HUMAN STANDARD; PRT; 410 AA.
AC Q99574;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Neuroserpin precursor (Protease inhibitor 12).
GN Name=SERPIN1; Synonyms=Pi12;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
```


RP MEDLINE-98391008; PubMed-9729122;
RX Berger P., Kozlov S.V., Krueger S.R., Sonderegger P.;
RT "Structure of the mouse gene for the serine protease inhibitor
neuroserpin (PIL2).";
RL Gene 214:25-33(1998).
RN [4]
RP CHARACTERIZATION.
RX MEDLINE-98113198; PubMed-9442076;
RA Osterwalder I., Cinelli P., Bacci A., Pennella A., Krueger S.R.,
Schrampf S.P., Meins M., Sonderegger P.;
RT "The axonally secreted serine proteinase inhibitor, neuroserpin,
inhibits plasminogen activators and plasmin but not thrombin.";
RL J. Biol. Chem. 273:2312-2321(1998).
RN [5]
RP X-RAY CRYSTALLOGRAPHY (3.06 ANGSTROMS).
RX MEDLINE-2141625; PubMed1157034;
RA Briand C., Kozlov S.V., Sonderegger P., Gruetter M.G.;
RT "Crystal structure of neuroserpin: a neuronal serpin involved in a
conformational disease.";
RL PRBS Lett. 505:18-22(2001).
CC -|- FUNCTION: Serine protease inhibitor that inhibits plasminogen
activators and plasmin but not thrombin. May be involved in the
formation or reorganization of synaptic connections as well as for
synaptic plasticity in the adult nervous system. May protect
neurons from cell damage by tissue-type plasminogen activator.
CC -|- SUBCELLULAR LOCATION: Secreted.
CC -|- TISSUE SPECIFICITY: During embryonic development mostly expressed
in CNS. In adult expressed in brain and much less in spinal cord,
heart, kidney and testis.
CC -|- SIMILARITY: Belongs to the serpin family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
between the Swiss Institute of Bioinformatics and the EMBL outstation -
the European Bioinformatics Institute. There are no restrictions on its
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entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
or send an email to license@isb-sib.ch).
CC -----
CC EMBL; AJ001700; CAA04939.1; .
DR EMBL; BC006776; AA06776.1; .
DR PDB; 1JJO; X-ray; A/B=25-64, C/D=101-361, E/F=367-399.
MGD; MGI:1194506; Serpin1.
DR InterPro; IPR000215; Prot_inh_serpin.
DR Pfam; PF00079; Serpin; 1.
DR SMART; SM00093; SERPIN; 1.
DR PROSITE; PS00284; SERPIN; 1.
KW 3D-structure; Glycoprotein; Serine protease inhibitor; Serpin; Signal.
FT SIGNAL 1 16 Potential.
FT CHAIN 17 410 Neuroserpin.
FT SITE 362 363 Reactive bond (By similarity).
FT CARBOHYD 157 157 N-linked (GlcNAc...) (potential).
FT CARBOHYD 321 321 N-linked (GlcNAc...) (potential).
FT CARBOHYD 401 401 N-linked (GlcNAc...) (potential).
FT CONFLICT 5 5 E -> G (in Ref. 2).
FT HELIX 26 33
FT TURN 34 38
FT STRAND 46 48
FT HELIX 50 60
FT TURN 61 62
FT STRAND 105 105
FT STRAND 108 115
FT HELIX 122 131
FT TURN 132 132
FT STRAND 136 139
FT TURN 141 142
FT HELIX 144 158
FT TURN 160 161
FT TURN 169 171
FT TURN 174 175
FT TURN 178 190
FT STRAND 191 192
FT TURN

FT TURN 196 197
FT STRAND 200 204
FT TURN 207 208
FT STRAND 212 220
FT STRAND 224 229
FT TURN 234 235
FT STRAND 238 246
FT TURN 249 250
FT STRAND 251 257
FT TURN 260 261
FT HELIX 264 266
FT TURN 267 270
FT HELIX 273 277
FT TURN 278 278
FT HELIX 279 281
FT TURN 282 282
FT STRAND 284 285
FT STRAND 289 293
FT STRAND 296 299
FT HELIX 303 308
FT TURN 309 310
FT STRAND 335 343
FT STRAND 348 358
FT STRAND 369 371
FT STRAND 376 382
FT TURN 383 385
FT STRAND 388 394
SQ SEQUENCE 410 AA; 46347 MW; DA3AF6F5195EBB7C CRC64;
Query Match 38.1%; Score 757.5; DB 1; Length 410;
Best Local Similarity 39.9%; Pred. No. 5.9e-43;
Matches 148; Conservative 93; Mismatches 125; Indels 5; Gaps 2;
QY 27 TEFAVDLVQEVSLSHKD-NIIFSPGLGITLVLEMVQLGKAKQAQOIROTLLAQQETSAGEE 85
DB 27 TEWSVMYNYHLRGTEGDENIIFSPJSTALAMGMELGAQGGSTRKEIRHSVMGYGLKGEE 86
QY 86 FLVLKSFCSAISSEKKQEFTFNLALALYLQEGFTVKEQYLHGNKEFFQSAIKLVDFQDARA 145
DB 87 FSLDFDFNSMASAEENQYVMKLANSLFVQNGFHVNEEFLQMKYFNAEVNHFVDSQNV 146
QY 146 CAEMISTVVERKTDGKIKDMFSGEBFGLTRVLVNLALYFKGDWKQKREKEDTQLINETK 205
DB 147 VANSINKWVENYTNGLKDLVSPEDFGVTNLALINAVYFKGNWKSQRPENTRTFTSK 206
QY 206 KNGSVTKIPMKALLRTKYGVFSESLN---YQVLELSYKGFDEFLIIIPAEQMDIEE 261
DB 207 DDESEVQIPMWYQQGEFFYGFESDGSNAGGIYQVLEIPIYEGDEISMMALSRQEVPLAT 266
QY 262 VEKLITAAQILKWLSEMQEEVEISLPRKVEQKVDKDLVLSLNIITIFSGGCOLSGIT 321
DB 267 LEPLLKALQIEWANSVKQKVEVYLPRFTVQEIDLKILKALGVTEIFIKDANLTAMS 326
QY 322 DSEVYVSQVTKVFFNEEDGSEATSTGHIPIVMSLAQSQFIANHPFLFIMKHNPTE 381
DB 327 DKKEFLSKAVHKSCIEVNEEGSEAAASGMIAISRMVLYPQVIVDHFVFLYLRNRKSG 386
QY 382 SILFMGRVTNP 392
DB 387 IILFMGRVTNP 397
RESULT 9
BAC27727
ID BAC27727 PRELIMINARY; PRT; 410 AA.
AC BAC27727 (T-EMBLrel. 27, Created)
DT 14-APR-2004 (T-EMBLrel. 27, Last sequence update)
DT 14-APR-2004 (T-EMBLrel. 27, Last annotation update)
DE Adult male olfactory brain cDNA, RIKEN full-length enriched library,
clone:6430403B13 product:serine (or cysteine) proteinase inhibitor,
clade I (neuroserpin), member 1, full insert sequence.
OS Mus musculus (Mouse).

QY 248 LIILPAEGMDIEVEKLIITAOQILKW--LSEMQEEVEISLPFRKVEQKDFKDVLYSL 305
Db 243 MIVLLPNEIDGLQKLEKLTAEKLMWTSQNRVTRVDLHLPRFKVESYDLKOTLRM 302
QY 306 NITEIFSGGCDLSGTDSSVYVSVQTKVFFNEIDGSEAAATSTGI---HIPVMSLA 361
Db 303 GMVDIFNGDADLSGTDGSRGLVSLGVLHKAFAVEVTEGAEAAAATAVVGFGSSP---TST 359
QY 362 QSQFIANHPFLFMKNPTESILFMGRVTNP 392
Db 360 NEEFHCNHPFLFFIRQNKNTSILFYGRFSSP 390

RESULT 14
Q86W04 PRELIMINARY; PRT; 390 AA.
AC Q86W04; 2003 (TREMELrel. 24, Created)
DT 01-JUN-2003 (TREMELrel. 24, last sequence update)
DT 01-JUN-2003 (TREMELrel. 24, last sequence update)
DE Squamous cell carcinoma antigen 1.
GN Name=SERPINB3;
OS Homo sapiens (Human);
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22982588; PubMed=12975381;
RA Moore P.L., Ong S., Harrison T.J.,
RT "Binding of HBV to cells is mediated by SCCA1 but does not require the
RT reactive site loop.";
RL J. Biol. Chem. 278:46709-46717(2003).
CC -!- SIMILARITY: Belongs to the serpin family.
DR EMBL; AJ515706; CAD5658.1; -.
DR HSP; P01008; 1ATH.
DR GO; GO:0004867; F:serine-type endopeptidase inhibitor activity; IEA.
DR InterPro; IPR000215; Prot_inh_serpin.
DR Pfam; PF00079; Serpin; 1.
DR SMART; SM00093; SERPIN; 1.
DR PROSITE; PS00284; SERPIN; 1.
KW Protease inhibitor; Serine protease inhibitor; Serpin.
SQ SEQUENCE 390 AA; 44504 MW; A56B24CA40CA1C76 CRC64;

Query Match 32.6%; Score 647; DB 2; Length 390;
Best Local Similarity 35.3%; Pred. No. 1.6e-35;
Matches 137; Conservative 89; Mismatches 142; Indels 20; Gaps 5;
QY 23 AOKNTEFAVDLYQEVSLSHKDNIIIPSLGITLVLEMLVOLGAKGAKQAQOIQTILKQETS- 81
Db 5 SEANTKFMFDLQOQFRKSKENNIFYPISITSALGMVLLGAKNTAQOIKKVLHFDQVTE 64
QY 82 -----AGEEFLVKSFCSAISSEKQKQFTFNALANALYLOEGFTVKEQYLHGK 128
Db 65 NTTGKAATYHVDNRSGNVHHQFKLLTFENKSTDAVELKIANKLFGKTYLFLQEYLDIAK 124
QY 129 EFFQSAIKLVDFQDA-KACAEMISTWVERKTDGKIDMFSGEEFGPLTRLVNLVNAIFYKG 187
Db 125 KFYQTSVESVDPANAPESRKKINSWVESQTNKIKNLIPEGNGSNTTLVLVNAIFYKG 184
QY 188 DWKQFRKEDTQLIINFTKNGSTVKIPMKALLRTKYGFSESSLYQVLELSYKGDPS 247
Db 185 RWKFKFNKEDTKEEFKFWPNKNTYKSIQMRQY--TSFHFASLEVDQAKVLEIPYKGDLS 242
QY 248 LIILPAEGMDIEVEKLIITAOQILKW--LSEMQEEVEISLPFRKVEQKDFKDVLYSL 305
Db 243 MIVLLPNEIDGLQKLEKLTAEKLMWTSQNRVTRVDLHLPRFKVESYDLKOTLRM 302
QY 306 NITEIFSGGCDLSGTDSSVYVSVQTKVFFNEIDGSEAAATSTG-IHIPVMSLAQSQ 364
Db 303 GMVDIFNGDADLSGTDGSRGLVSLGVLHKAFAVEVTEGAEAAAATAVVGFGSSP 362
QY 365 FTANHPFLFMKNPTESILFMGRVTNP 392
Db 363 FHCNHPFLFFIRQNKNTSILFYGRFSSP 390

RESULT 15
Q8IX13 PRELIMINARY; PRT; 390 AA.
AC Q8IX13;
DT 01-MAR-2003 (TREMELrel. 23, Created)
DT 01-MAR-2003 (TREMELrel. 23, last sequence update)
DE Squamous cell carcinoma antigen 1.
GN Name=SERPINB3;
OS Homo sapiens (Human);
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22982588; PubMed=12975381;
RA Moore P.L., Ong S., Harrison T.J.,
RT "Binding of HBV to cells is mediated by SCCA1 but does not require the
RT reactive site loop.";
RL J. Biol. Chem. 278:46709-46717(2003).
CC -!- SIMILARITY: Belongs to the serpin family.
DR EMBL; AJ515706; CAD5658.1; -.
DR HSP; P01008; 1ATH.
DR GO; GO:0004867; F:serine-type endopeptidase inhibitor activity; IEA.
DR InterPro; IPR000215; Prot_inh_serpin.
DR Pfam; PF00079; Serpin; 1.
DR SMART; SM00093; SERPIN; 1.
DR PROSITE; PS00284; SERPIN; 1.
KW Protease inhibitor; Serine protease inhibitor; Serpin.
SQ SEQUENCE 390 AA; 44504 MW; E9D56D2D786C9E24 CRC64;

Query Match 32.2%; Score 640; DB 2; Length 390;
Best Local Similarity 34.9%; Pred. No. 4.8e-35;
Matches 137; Conservative 89; Mismatches 137; Indels 30; Gaps 6;
QY 23 AOKNTEFAVDLYQEVSLSHKDNIIIPSLGITLVLEMLVOLGAKGAKQAQOIQTILKQETS- 81
Db 5 SEANTKFMFDLQOQFRKSKENNIFYPISITSALGMVLLGAKNTAQOIKKVLHFDQVTE 64
QY 82 -----AGEEFLVKSFCSAISSEKQKQFTFNALANALYLOEGFTVKEQYLHGK 128
Db 65 NTTGKAATYHVDNRSGNVHHQFKLLTFENKSTDAVELKIANKLFGKTYLFLQEYLDIAK 124
QY 129 EFFQSAIKLVDFQDA-KACAEMISTWVERKTDGKIDMFSGEEFGPLTRLVNLVNAIFYKG 187
Db 125 KFYQTSVESVDPANAPESRKKINSWVESQTNKIKNLIPEGNGSNTTLVLVNAIFYKG 184
QY 188 DWKQFRKEDTQLIINFTKNGSTVKIPMKALLRTKYGFSESSLYQVLELSYKGDPS 247
Db 185 QWEKFNKEDTKEEFKFWPNKNTYKSIQMRQY--TSFHFASLEVDQAKVLEIPYKGDLS 242
QY 248 LIILPAEGMDIEVEKLIITAOQILKW--LSEMQEEVEISLPFRKVEQKDFKDVLYSL 305
Db 243 MIVLLPNEIDGLQKLEKLTAEKLMWTSQNRVTRVDLHLPRFKVESYDLKOTLRM 302
QY 306 NITEIFSGGCDLSGTDSSVYVSVQTKVFFNEIDGSEAAATSTG-IHIPVMSLAQSQ-- 363
Db 303 GMVDIFNGDADLSGTDGSRGLVSLGVLHKAFAVEVTEGAEAAAATAVVGFGSSP 357
QY 364 -----QFIANHPFLFMKNPTESILFMGRVTNP 392
Db 358 STNEEFHCNHPFLFFIRQNKNTSILFYGRFSSP 390

Search completed: October 21, 2004, 06:45:30
Job time : 196 secs

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OM protein - protein search, using sw model

Run on: October 21, 2004, 06:33:26 ; Search time 71 Seconds

(without alignments)
1980.590 Million cell updates/sec

Title: US-10-628-395-2

Perfect score: 1987

Sequence: 1 MDTFLWSILLFLFGQSASR.....FMKHNPTEILFMGRVTNP 392

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : A_Geneseq_23Sep04.*

1: Geneseq1980s.*

2: Geneseq1990s.*

3: Geneseq2000s.*

4: Geneseq2001s.*

5: Geneseq2002s.*

6: Geneseq2003as.*

7: Geneseq2003bs.*

8: Geneseq2004s.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1987	100.0	392	2	Aaw48391 Homo sapi
2	1987	100.0	392	2	Aay04120 Pancreas
3	1987	100.0	392	5	Aae14266 Human Pan
4	1987	100.0	392	6	Abg72445 Human Pan
5	1987	100.0	392	8	Ado05045 Human PAP
6	1987	100.0	405	2	Aay04121 Pancreas
7	1987	100.0	405	5	Aae14267 Human Pan
8	1987	100.0	405	6	Abg72448 Human Pan
9	1987	100.0	405	8	Ado05056 Human PAP
10	1972	99.2	405	8	Adq19238 Human sof
11	1969	99.0	405	2	Aay01601 Protein e
12	1823.5	91.8	406	2	Aaw06202 Human pan
13	791.5	39.8	410	2	Aaw60054 Brain-ass
14	791.5	39.8	410	2	Aay31663 Human neu
15	791.5	39.8	410	3	Aay67239 Brain-Ass
16	791.5	39.8	410	3	Aay58172 Human neu
17	791.5	39.8	410	3	Aab19550 Human bra
18	791.5	39.8	410	4	Aau00537 Human BAI
19	791.5	39.8	410	6	Abg76081 Human bra
20	791.5	39.8	410	6	Abu56517 Lung canc
21	791.5	39.8	410	7	ADG47609 Human BAI
22	788.5	39.7	410	7	Adf28923 Chicken s
23	788.5	39.7	410	7	Adg47610 Chicken n
24	757.5	38.1	410	2	Aay31684 Mouse neu
25	757.5	38.1	410	3	Aay58173 Murine ne

26	751	37.8	407	2	Aaw08384	Novel ser
27	687.5	34.6	356	4	Aam23714	Human EST
28	658	33.1	390	8	Adk39787	Human squ
29	656	33.0	390	2	Aaw15241	Protiasta
30	651	32.8	390	6	ABB98808	SCCA1/SCC
31	649	32.7	390	2	AAY32077	Hepatitis
32	649	32.7	390	2	AAY25928	Human SCC
33	649	32.7	390	4	AAY72654	Human squ
34	649	32.7	390	6	ABB98810	SCCA1 pro
35	649	32.7	390	8	ADJ66516	Squamous
36	649	32.7	390	8	ADK70439	Respirato
37	649	32.7	390	8	ADK39782	Human squ
38	649	32.7	390	8	ADM91772	Squamous
39	649	32.7	390	8	ADN04442	Antipsori
40	647	32.6	390	2	AAY32078	Hepatitis
41	646	32.5	390	2	AAR25276	Squamous
42	639	32.2	390	6	ABB98670	SCCA1/SCC
43	636	32.0	390	2	AAY25927	Human SCC
44	636	32.0	390	4	AAY72655	Human squ
45	636	32.0	390	6	ABB98811	SCCA2 pro

ALIGNMENTS

RESULT 1

ID AAW48391 standard; protein; 392 AA.

AC AAW48391;

DT 03-AUG-1998 (first entry)

DE Homo sapiens pancreas-derived plasminogen activator inhibitor.

KW pancreas-derived; plasminogen activator; inhibitor; PAPAI; diagnosis;

KW treatment; disorder; cancer; blood coagulation; viral infection;

KW pregnancy complications; preeclampsia; intrauterine growth retardation;

KW wound healing; tumour invasion; metastasis; leukaemia; lung; breast;

KW endometrial; ovarian; melanoma; gastrointestinal; pancreatic; colorectal;

KW coagulation; thrombi; arterial; venous; inflammation; antiviral; HIV-1;

KW HIV-2; hepatitis.

OS Homo sapiens.

FX Key Location/Qualifiers

FT Peptide 1..14

FT Protein 15..392

FT Protein /label= mature PAPAI

FT WO9807735-A1.

FT 26-FEB-1998.

FT 16-AUG-1996; 96WO-US013283.

FT 16-AUG-1996; 96WO-US013283.

FT (HUNA-) HUMAN GENOME SCI INC.

FX Ni J, Gentz RL, Ruben SM;

DR WPI; 1998-169083/15.

DR N-PSDB; AAV17829.

PT New isolated pancreas-derived plasminogen activator inhibitor - useful for developing products for diagnosis and treatment of disorders, e.g. cancers, blood coagulation or viral infections.

PS Claim 16; Fig 1; 88pp; English.

CC The sequence is that of pancreas-derived plasminogen activator inhibitor

CC (PAPAI). PAPAI can be used for treating conditions in which abnormal
CC activity of the plasminogen activator (PA) system is implicated e.g.
CC complications of pregnancy such as preeclampsia and intrauterine growth
CC retardation, cancer and wound healing. Since plasminogen activator
CC inhibitors (PAI) inhibit tumour cell invasion and metastasis, the
CC products provide a method for treating or preventing tumour invasion and
CC metastasis in cancers including leukaemia, lung cancer, breast cancer,
CC endometrial and ovarian cancer, melanoma, and gastrointestinal cancers,
CC including pancreatic cancer and colorectal cancer. In addition, since
CC PAI's inhibit fibrinolysis, the products provide a method for treating or
CC preventing coagulation disorders including arterial thrombi, venous
CC thrombi, disseminated intravascular coagulation, and excessive bleeding
CC caused by the administration of a pharmaceutical PA such as urokinase or
CC tissue PA. Further, since PA's are effective antiviral agents, the
CC products provide a method for treating or preventing infections caused by
CC viruses including HIV-1, HIV-2 and hepatitis A, B, C, E, F, and G. The
CC products can also be used for detection and diagnosis of the above
CC disorders
CC
SQ Sequence 392 AA;

Query Match 100.0%; Score 1987; DB 2; Length 392;
Best Local Similarity 100.0%; Pred. No. 5.8e-170; Indels 0; Gaps 0;
Matches 392; Conservative 0; Mismatches 0;

QY 1 MDTIFLWSLLLLPFGSQAQKNTPEAVDLYQVSLSHKDNIFSPGLGITLVLEWVQ 60
Db 1 MDTIFLWSLLLLPFGSQAQKNTPEAVDLYQVSLSHKDNIFSPGLGITLVLEWVQ 60
QY 61 LGAGKAQQOIROTLKQOETSAGEEFLVLSKCSAISSEKKQFTFNALYVQSGFTVK 120
Db 61 LGAGKAQQOIROTLKQOETSAGEEFLVLSKCSAISSEKKQFTFNALYVQSGFTVK 120
QY 121 EQYLGHNKEFFQSAIKLVDFQDAKCAEMISTWVERKTDGKIDMFSGEEFGPLRLVLV 180
Db 121 EQYLGHNKEFFQSAIKLVDFQDAKCAEMISTWVERKTDGKIDMFSGEEFGPLRLVLV 180
QY 181 NAIYFGDKWKQKFKEDTQINFTKNGSTVKIPMKALLRTKYGFSESSLYNQVLELS 240
Db 181 NAIYFGDKWKQKFKEDTQINFTKNGSTVKIPMKALLRTKYGFSESSLYNQVLELS 240
QY 241 YKGFDEFLIIILPAEGMDIEVEKLIITAOQILKWLSEMOEEVEISLPRFKVEQKVDKFD 300
Db 241 YKGFDEFLIIILPAEGMDIEVEKLIITAOQILKWLSEMOEEVEISLPRFKVEQKVDKFD 300
QY 301 VLYSLNITEIFSGGCDLSGITDSSEVYVSVQTKVFFFEINEDGSEAAATSTGHIPIVMSL 360
Db 301 VLYSLNITEIFSGGCDLSGITDSSEVYVSVQTKVFFFEINEDGSEAAATSTGHIPIVMSL 360
QY 361 AQSQFIANHPFLFIMKHNPTEISILFMGRVTNP 392
Db 361 AQSQFIANHPFLFIMKHNPTEISILFMGRVTNP 392

RESULT 2
AA04120
ID AA04120 standard; protein; 392 AA.
XX
AC AA04120;
XX
XX 14-JUN-1999 (first entry)
DT
DE Pancreas derived plasminogen activator inhibitor protein.
XX
XX Pancreas derived plasminogen activator inhibitor; PAPAI; detection;
KW diagnosis; breast cancer; pregnancy; wound healing; coagulation disorder;
KW virus infection.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FT Peptide 1..14
FT /label= signal

Protein 15..392
/label= PAPAI
FT
XX WO9909161-A1.
PN
XX 25-FEB-1999.
PD
XX 18-FEB-1998; 98WO-US003217.
PF
XX 15-AUG-1997; 97US-00934011.
PR
XX (HUMA-) HUMAN GENOME SCI INC.
PA
XX (LONG-) LONG ISLAND JEWISH MEDICAL CENT.
PI
XX Ni J, Gentz RL, Ruben SM, Shi YE;
DR WPI; 1999-190161/16.
DR N-PSDB; AAX19885.
XX

New isolated pancreas-derived plasminogen activator inhibitor - useful
for developing products for treating conditions such as complications of
pregnancy, cancer, wound healing, coagulation disorders or virus
infection.

Claim 11; Fig 1; 123pp; English.

The present sequence represents an isolated human pancreas-derived
plasminogen activator inhibitor (PAPAI). PAPAI proteins inhibit
plasminogen activators such as urokinase and tissue plasminogen
activator. Products from the present invention can be used for treating
conditions in which abnormal activity of the plasminogen activator system
is implicated, e.g. complications of pregnancy such as preeclampsia and
intrauterine growth retardation, cancer, inflammation and wound healing.
The can also be used for treating or preventing e.g. tumour invasion and
metastasis, coagulation disorders e.g. arterial thrombi, venous thrombi,
disseminated intravascular coagulation, and excessive bleeding caused by
the administration of a pharmaceutical plasminogen activator, infections
caused by viruses e.g. HIV-1, HIV-2, hepatitis A, B, C, E, F or G. The
products can also be used for detection and diagnosis

Sequence 392 AA;

Query Match 100.0%; Score 1987; DB 2; Length 392;
Best Local Similarity 100.0%; Pred. No. 5.8e-170; Indels 0; Gaps 0;
Matches 392; Conservative 0; Mismatches 0;

QY 1 MDTIFLWSLLLLPFGSQAQKNTPEAVDLYQVSLSHKDNIFSPGLGITLVLEWVQ 60
Db 1 MDTIFLWSLLLLPFGSQAQKNTPEAVDLYQVSLSHKDNIFSPGLGITLVLEWVQ 60
QY 61 LGAGKAQQOIROTLKQOETSAGEEFLVLSKCSAISSEKKQFTFNALYVQSGFTVK 120
Db 61 LGAGKAQQOIROTLKQOETSAGEEFLVLSKCSAISSEKKQFTFNALYVQSGFTVK 120
QY 121 EQYLGHNKEFFQSAIKLVDFQDAKCAEMISTWVERKTDGKIDMFSGEEFGPLRLVLV 180
Db 121 EQYLGHNKEFFQSAIKLVDFQDAKCAEMISTWVERKTDGKIDMFSGEEFGPLRLVLV 180
QY 181 NAIYFGDKWKQKFKEDTQINFTKNGSTVKIPMKALLRTKYGFSESSLYNQVLELS 240
Db 181 NAIYFGDKWKQKFKEDTQINFTKNGSTVKIPMKALLRTKYGFSESSLYNQVLELS 240
QY 241 YKGFDEFLIIILPAEGMDIEVEKLIITAOQILKWLSEMOEEVEISLPRFKVEQKVDKFD 300
Db 241 YKGFDEFLIIILPAEGMDIEVEKLIITAOQILKWLSEMOEEVEISLPRFKVEQKVDKFD 300
QY 301 VLYSLNITEIFSGGCDLSGITDSSEVYVSVQTKVFFFEINEDGSEAAATSTGHIPIVMSL 360
Db 301 VLYSLNITEIFSGGCDLSGITDSSEVYVSVQTKVFFFEINEDGSEAAATSTGHIPIVMSL 360
QY 361 AQSQFIANHPFLFIMKHNPTEISILFMGRVTNP 392
Db 361 AQSQFIANHPFLFIMKHNPTEISILFMGRVTNP 392

RESULT 3
AAE14266
ID AAE14266 standard; protein; 392 AA.
XX
XX
AC AAE14266;
XX
XX 07-MAR-2002 (first entry)
XX
XX Human Pancreas-derived plasminogen activator inhibitor (PAPAI) #1.
DE
DE Human; pancreas-derived plasminogen activator inhibitor; PAPAI;
KW plasminogen activator inhibitor; PAI; pre-eclampsia; wound healing;
KW intrauterine growth retardation; tumour cell invasion; arthritis;
KW metastasis; inflammation; inflammatory bowel disease; appendicitis;
KW systemic lupus erythematosus; ovulation; cytostatic; gene therapy;
KW prostatic involution; osteonecrosis; breast cancer; pregnancy.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Peptide 1..14
FT /label= Signal_peptide
FT Protein 15..392
FT /note= "Human mature PAPAI"
XX
XX US6303338-B1.
FN
XX
XX 16-OCT-2001.
PD
XX
XX 19-FEB-1998; 98US-00026408.
PF
XX
XX 16-AUG-1996; 96US-0024056P.
PR
XX 15-AUG-1997; 97US-00934011.
XX
XX (HUMA-) HUMAN GENOME SCI INC.
PA
XX
XX Ni J, Gentz RL, Ruben SM, Shi YE;
PI
XX WPI; 2002-033216/04.
DR
XX N-PSDB; AAD23710.
XX
XX Isolated polynucleotides encoding the pancreas-derived plasminogen
PT activator inhibitor protein are useful to treat physiological and
PT pathological conditions including breast cancer, and to detect
PT pathological disorders.
XX
XX Claim 1; Fig 1; 50pp; English.
PS
XX
XX The invention relates to nucleic acids encoding pancreas-derived
CC plasminogen activator inhibitor (PAPAI) protein. Plasminogen activator
CC inhibitor (PAI) 1 and 2 are involved in many physiological and
CC pathological processes, including normal pregnancy, pre-eclampsia,
CC intrauterine growth retardation, wound healing, tumour cell invasion and
CC metastasis, inflammation and arthritis, inflammatory bowel disease,
CC appendicitis, complications from systemic lupus erythematosus, ovulation
CC and prostatic involution and osteonecrosis. PAPAI DNA is used to treat
CC physiological and pathological conditions including breast cancer and to
CC detect pathological disorders. PAPAI DNA is used in gene therapy. The
XX present sequence is a human PAPAI protein
XX
SQ Sequence 392 AA;
Query Match 100.0%; Score 1987; DB 5; Length 392;
Best Local Similarity 100.0%; Pred. No. 5.8e-170;
Matches 392; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MDTIFLWSLLLLPFGQAQRCQAQKNTFAVDLYQVSLSHKDNIFPSPLGLTLVLEWVQ 60
DB 1 MDTIFLWSLLLLPFGQAQRCQAQKNTFAVDLYQVSLSHKDNIFPSPLGLTLVLEWVQ 60
QY 61 LGAKGAQQQIRQTLKQQTSAEEFLVLSFCSAISEKKQETTFNLALYVQEGFTVK 120

Db 61 LGAKGAQQQIRQTLKQQTSAEEFLVLSFCSAISEKKQETTFNLALYVQEGFTVK 120
QY 121 EQYLHGNKEFFQSAIKLVDFQDAKACAEIMSTWVERKTGDKIXDMFSGBEFGELTRVLV 180
Db 121 EQYLHGNKEFFQSAIKLVDFQDAKACAEIMSTWVERKTGDKIXDMFSGBEFGELTRVLV 180
QY 181 NAIYFKGDWQKFRKEDTQLINFTKNGSTVKIPMKKALIRTKYGFSSSLNYQVLELS 240
Db 181 NAIYFKGDWQKFRKEDTQLINFTKNGSTVKIPMKKALIRTKYGFSSSLNYQVLELS 240
QY 241 YKGDEFSLIIILPAEGMDIEVEKLIITAQQIILKWLSEMQEEVEISILPRFKVQKVDKFD 300
Db 241 YKGDEFSLIIILPAEGMDIEVEKLIITAQQIILKWLSEMQEEVEISILPRFKVQKVDKFD 300
QY 301 VLVSINITEIFSGCDLSGTDSEVYVSQVTKVFFINEDGSEATSTGIHPVIMSL 360
Db 301 VLVSINITEIFSGCDLSGTDSEVYVSQVTKVFFINEDGSEATSTGIHPVIMSL 360
QY 361 AQSOFIANHPFLFIMKHNPTESILFMGRVTNP 392
Db 361 AQSOFIANHPFLFIMKHNPTESILFMGRVTNP 392
RESULT 4
ABG72445
ID ABG72445 standard; protein; 392 AA.
XX
XX AC ABG72445;
XX
XX 14-FEB-2003 (first entry)
XX
XX Human pancreas-derived plasminogen activator inhibitor #1.
XX
XX Human; pancreas-derived plasminogen activator inhibitor; PAPAI;
KW cytostatic; vulnerability; gynecological; haemostatic; virucide; HIV;
KW human immunodeficiency virus; gene therapy; fibrinolytic system;
KW tumour invasion; metastasis; haemorrhage; hepatic illness; liver cancer;
KW alcoholic cirrhosis; primary biliary cirrhosis; pre-eclampsia; eclampsia;
KW leukaemia; breast cancer; lung cancer; coagulation disorder;
KW arterial thrombus; venous thrombus; excessive bleeding; viral infection;
KW hepatitis; wound healing; intrauterine growth retardation.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH Peptide 1..14
FT /label= Signal_peptide
FT Protein 15..392
FT /label= Mature_PAPAI
FT /note= "Pancreas-derived plasminogen activator inhibitor"
XX
XX US2002127640-A1.
PN
XX
XX 12-SEP-2002.
PD
XX
XX 12-JUL-2001; 2001US-00902684.
PF
XX
XX 16-AUG-1996; 96US-0024056P.
PR
XX 15-AUG-1997; 97US-00934011.
PR
XX 19-FEB-1998; 98US-00026408.
XX
XX (HUMA-) HUMAN GENOME SCI INC.
PA
XX
XX Ni J, Gentz RL, Ruben SM, Shi YE;
PI
XX WPI; 2003-066897/06.
DR
XX N-PSDB; ABS57769.
XX
XX Novel isolated pancreas-derived plasminogen activator inhibitor
PT polypeptide useful for treating or inhibiting tumor invasion and
PT metastasis in cancers, pre-eclampsia, arterial or venous thrombi,
PT excessive bleeding.

XX Claim 11; Fig 1A-B; 52pp; English.
 XX
 CC The invention describes an isolated pancreas-derived plasminogen
 CC activator inhibitor (PAPAI) polypeptide (I). The polynucleotide (II)
 CC encoding (I) is useful for diagnosing a disorder involving comparing
 CC PAPAI gene expression levels in cells or body fluid of an individual with
 CC the standard expression level where an increase or decrease in the PAPAI
 CC gene expression level of the individual is indicative of the disorder.
 CC Since PAPAI regulates fibrinolytic system, substantial alterations in
 CC PAPAI activity serve as markers of tumour invasiveness and metastasis.
 CC (II) is useful for predicting whether a tumour is likely to remain
 CC stable, or the invade tissue and ultimately metastasize; a haemorrhage
 CC likely to occur in patients suffering from hepatic illness such as
 CC alcoholic cirrhosis, primary biliary cirrhosis, and liver cancer; a
 CC patient is likely to develop pre-eclampsia; and if a pre-eclamptic
 CC patient is at risk for developing eclampsia. (I) is useful for raising
 CC polyclonal and monoclonal antibodies which are useful in diagnostic
 CC assays for detecting PAPAI protein expression, and to capture PAPAI
 CC protein binding proteins which are also candidate agonist or antagonist.
 CC (I) is useful for treating: or inhibiting tumour invasion and metastasis
 CC in cancers including e.g., leukaemia, breast cancer, lung cancer;
 CC coagulation disorders e.g., arterial thrombi, venous thrombi, excessive
 CC bleeding and treating viral infections such as human immunodeficiency
 CC virus, hepatitis A, B, C, E or G virus. (I) inhibits plasminogen
 CC activator system, and thus is useful for treating disease conditions in
 CC which abnormal activity of plasminogen-activator system is implicated,
 CC e.g., complications of pregnancy such as pre-eclampsia, wound healing and
 CC intrauterine growth retardation. This is the amino acid sequence of a
 CC human pancreas-derived plasminogen activator inhibitor
 XX
 SQ Sequence 392 AA;

Query Match 100.0%; Score 1987; DB 6; Length 392;
 Best Local Similarity 100.0%; Pred. No. 5.8e-170;
 Matches 392; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MDTIFLWSLLLLFFGSAQRCNAQKNTFAVDLYQEVSLSHKDNIFSPGLGTLVLEWVQ 60
 DB 1 MDTIFLWSLLLLFFGSAQRCNAQKNTFAVDLYQEVSLSHKDNIFSPGLGTLVLEWVQ 60
 QY 61 LGAKGKAAQQIROTLLKQQTSAAGEEFLVLKSCSAISEKKQFTFNLANALYLQEGFTVK 120
 DB 61 LGAKGKAAQQIROTLLKQQTSAAGEEFLVLKSCSAISEKKQFTFNLANALYLQEGFTVK 120
 QY 121 EQYLHGNKEFFQSAIKLVDFQDAKCAEMISTWVERKTDGKIDMFSGEEFGPLRLVLV 180
 DB 121 EQYLHGNKEFFQSAIKLVDFQDAKCAEMISTWVERKTDGKIDMFSGEEFGPLRLVLV 180
 QY 181 NAIYFGKDWKQKPRKEDTQINFTKNGSTVKIPMWKALLRTKYGYFSSSLNYQVLELS 240
 DB 181 NAIYFGKDWKQKPRKEDTQINFTKNGSTVKIPMWKALLRTKYGYFSSSLNYQVLELS 240
 QY 241 YKDEFSLLIILPAEGMDIEVEKLITAOQILKWLSEMOEEVEISLPRFKVEQKVDK 300
 DB 241 YKDEFSLLIILPAEGMDIEVEKLITAOQILKWLSEMOEEVEISLPRFKVEQKVDK 300
 QY 301 VLYSLNITBIFSGCDLSDGTSSEVYVSVQTKVFFNEINEDGSAATSTGHIPIVMSL 360
 DB 301 VLYSLNITBIFSGCDLSDGTSSEVYVSVQTKVFFNEINEDGSAATSTGHIPIVMSL 360
 QY 361 AQSQFTANHPFLFMKHNPTESILFNGRVNTP 392
 DB 361 AQSQFTANHPFLFMKHNPTESILFNGRVNTP 392

RESULT 5
 ADO05045
 ID ADO05045 standard; protein; 392 AA.
 XX
 AC ADO05045;
 XX
 DT 29-JUL-2004 (first entry)

XX DE Human PAPAI protein #1.
 XX KW Pancreas-derived plasminogen activator inhibitor; PAPAI; human.
 XX OS Homo sapiens.
 XX FH Key Location/Qualifiers
 FT Peptide 1..14 /label= signal_peptide
 FT Protein 15..392 /note= "Human mature PAPAI protein"
 FT
 XX US2004086978-A1.
 XX 06-MAY-2004.
 XX 29-JUL-2003; 2003US-00628395.
 XX 16-AUG-1996; 96US-0024056P.
 XX 15-AUG-1997; 97US-00934011.
 XX 19-FEB-1998; 98US-00026408.
 XX 12-JUL-2001; 2001US-00902684.
 XX (NIJJ/) NI J.
 PA (GENTZ/) GENTZ R L.
 PA (RUBE/) RUBEN S M.
 PA (SHIY/) SHI Y E.
 XX
 PI NI J, Gentz RL, Ruben SM, Shi YE;
 XX
 XX WPI: 2004-356204/33.
 XX N-PSDB; ADO05044.
 XX
 PT Producing an antibody that specifically binds to pancreas-derived
 PT plasminogen activator inhibitor (PAPAI) polypeptide comprises introducing
 PT the polypeptide to the animal, and recovering the antibody.
 XX
 PS Claim 1; SEQ ID NO 2; 51pp; English.
 CC The present invention provides pancreas-derived plasminogen activator
 CC inhibitor (PAPAI) polypeptides and their encoding polynucleotides. The
 CC invention is useful for producing an antibody that specifically binds to
 CC pancreas-derived plasminogen activator inhibitor (PAPAI) polypeptide. The
 CC present sequence is human pancreas-derived plasminogen activator
 CC inhibitor (PAPAI) protein.
 XX
 SQ Sequence 392 AA;

Query Match 100.0%; Score 1987; DB 8; Length 392;
 Best Local Similarity 100.0%; Pred. No. 5.8e-170;
 Matches 392; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MDTIFLWSLLLLFFGSAQRCNAQKNTFAVDLYQEVSLSHKDNIFSPGLGTLVLEWVQ 60
 DB 1 MDTIFLWSLLLLFFGSAQRCNAQKNTFAVDLYQEVSLSHKDNIFSPGLGTLVLEWVQ 60
 QY 61 LGAKGKAAQQIROTLLKQQTSAAGEEFLVLKSCSAISEKKQFTFNLANALYLQEGFTVK 120
 DB 61 LGAKGKAAQQIROTLLKQQTSAAGEEFLVLKSCSAISEKKQFTFNLANALYLQEGFTVK 120
 QY 121 EQYLHGNKEFFQSAIKLVDFQDAKCAEMISTWVERKTDGKIDMFSGEEFGPLRLVLV 180
 DB 121 EQYLHGNKEFFQSAIKLVDFQDAKCAEMISTWVERKTDGKIDMFSGEEFGPLRLVLV 180
 QY 181 NAIYFGKDWKQKPRKEDTQINFTKNGSTVKIPMWKALLRTKYGYFSSSLNYQVLELS 240
 DB 181 NAIYFGKDWKQKPRKEDTQINFTKNGSTVKIPMWKALLRTKYGYFSSSLNYQVLELS 240
 QY 241 YKDEFSLLIILPAEGMDIEVEKLITAOQILKWLSEMOEEVEISLPRFKVEQKVDK 300
 DB 241 YKDEFSLLIILPAEGMDIEVEKLITAOQILKWLSEMOEEVEISLPRFKVEQKVDK 300

Qy	301	VLYSLNITFI	FGGCDLSGITDSSSEVYVSQTKVFPEINEDGGEAAATSTGIHIPVINSL	360
Dd	301	VLYSLNITFI	FGGCDLSGITDSSSEVYVSQTKVFPEINEDGGEAAATSTGIHIPVINSL	360
Qy	361	AQSQTIANHPFLFIMKHNPTESILFWGRVTNP	392	
Dd	361	AQSQTIANHPFLFIMKHNPTESILFWGRVTNP	392	
RESULT 6				
ID	AY04121			
XX	AAAY04121	standard; protein; 405 AA.		
AC	AAAY04121;			
DT	14-JUN-1999	(first entry)		
DE	Pancreas derived plasminogen activator inhibitor protein.			
DE	Pancreas derived plasminogen activator inhibitor; PAPAI; detection;			
KW	diagnosis; breast cancer; pregnancy; wound healing; coagulation disorder;			
KW	virus infection.			
OS	Homo sapiens.			
XX	Key	Location/Qualifiers		
FT	Peptide	1..18		
FT	Protein	/label= signal		
FT		20..405		
FT		/label= PAPAI		
XX	WO9909161-A1.			
PN	XX			
PD	XX			
PP	18-FEB-1998;	98WO-US003217.		
PR	15-AUG-1997;	97US-00934011.		
PA	{HUMA-} HUMAN GENOME SCI INC.			
PA	(LONG-) LONG ISLAND JEWISH MEDICAL CENT.			
PI	Ni J, Gentz RL, Ruben SM, Shi YE;			
DR	WPI; 1999-190161/16.			
DR	N-PSDB; AAX19886.			
PT	New isolated pancreas-derived plasminogen activator inhibitor - useful			
PT	for developing products for treating conditions such as complications of			
PT	pregnancy, cancer, wound healing, coagulation disorders or virus			
PT	infection.			
PS	Claim 11; Fig 4; 123pp; English.			
XX	The present sequence represents an isolated human pancreas-derived			
CC	plasminogen activator inhibitor (PAPAI). PAPAI proteins inhibit			
CC	plasminogen activators such as urokinase and tissue plasminogen			
CC	activator. Products from the present invention can be used for treating			
CC	conditions in which abnormal activity of the plasminogen activator system			
CC	is implicated, e.g. complications of pregnancy such as preeclampsia and			
CC	intrauterine growth retardation, cancer, inflammation and wound healing.			
CC	They can also be used for treating or preventing e.g. tumour invasion and			
CC	metastasis, coagulation disorders e.g. arterial thrombi, venous thrombi,			
CC	dissminated intravascular coagulation, and excessive bleeding caused by			
CC	the administration of a pharmaceutical plasminogen activator, infections			
CC	caused by viruses e.g. HIV-1, HIV-2, hepatitis A, B, C, E, F or G. The			
CC	products can also be used for detection and diagnosis			
XX	Sequence 405 AA;			
QQ				
Query Match 100.0%; Score 1987; DB 2; Length 405;				
Best Local Similarity 100.0%; Pred. No. 6e-170;				
Matches 392; Conservative 0; Mismatches 0; Indels 0; Gaps 0;				

```
Query Match      100.0%; Score 1987; DB 2; Length 405;
Best Local Similarity 100.0%; Pred. No. 6e-170;
Matches 392; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```



```
QY 121 EQYLHGNKEFFQSAIKLVDFQDAKACAEMISTWVERKTDGKIKDMFSGBEFGPLRLVLV 180
Db 121 EQYLHGNKEFFQSAIKLVDFQDAKACAEMISTWVERKTDGKIKDMFSGBEFGPLRLVLV 180
QY 181 NAIYFKGDWKQKFRKEDTQLINFTKNGSTVKIPMKALLRTKYGYFSSSLNYQVLELS 240
Db 181 NAIYFKGDWKQKFRKEDTQLINFTKNGSTVKIPMKALLRTKYGYFSSSLNYQVLELS 240
QY 241 YKGDEFSLIILPAEGMDIEBEVKLITAQOILKWLSEMOBEEVEISLPRFKVEQKVDKFD 300
Db 241 YKGDEFSLIILPAEGMDIEBEVKLITAQOILKWLSEMOBEEVEISLPRFKVEQKVDKFD 300
QY 301 VLYSLNITEIFSGGCDLSGITDSSEVYVSQVTKVFFNEEDGSEAAATSTGIHIPVIMSL 360
Db 301 VLYSLNITEIFSGGCDLSGITDSSEVYVSQVTKVFFNEEDGSEAAATSTGIHIPVIMSL 360
QY 361 AQSOFTIANHPELFIMKHNPTESILFMGRVTNP 392
Db 361 AQSOFTIANHPELFIMKHNPTESILFMGRVTNP 392

RESULT 9
ADO05056
ID ADO05056 standard; protein; 405 AA.
XX
AC ADO05056;
XX
XX 29-JUL-2004 (first entry)
XX
DE Human PAPAI protein #2.
XX
KW Pancreas-derived plasminogen activator inhibitor; PAPAI; human.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Peptide 1..18
FT /label= Signal_peptide
FT Protein 19..392
FT /note= "Human mature PAPAI protein"
XX
FN US2004086978-A1.
XX
XX 06-MAY-2004.
XX
XX 29-JUL-2003; 2003US-00628395.
XX
PR 16-AUG-1996; 96US-0024056P.
PR 15-AUG-1997; 97US-00934011.
PR 19-FEB-1998; 98US-00026408.
PR 12-JUL-2001; 2001US-00902684.
XX
XX (NIJ/) NI J.
PA (GENTZ/) GENTZ R L.
PA (RUBE/) RUBEN S M.
PA (SHIY/) SHI Y E.
XX
XX Ni J, Gentz RL, Ruben SM, Shi YE;
XX
XX WPI; 2004-356204/33.
XX N-PSDB; ADO05055.
XX
PT Producing an antibody that specifically binds to pancreas-derived
PT plasminogen activator inhibitor (PAPAI) polypeptide comprises introducing
PT the polypeptide to the animal, and recovering the antibody.
XX
XX Disclosure; SEQ ID NO 13; 51pp; English.
XX
XX The present invention provides pancreas-derived plasminogen activator
XX inhibitor (PAPAI) polypeptides and their encoding polynucleotides. The
XX invention is useful for producing an antibody that specifically binds to
XX pancreas-derived plasminogen activator inhibitor (PAPAI) polypeptide. The
XX present sequence is human pancreas-derived plasminogen activator
```

```
CC inhibitor (PAPAI) protein.
XX
SQ Sequence 405 AA;

Query Match 100.0%; Score 1987; DB 8; Length 405;
Best Local Similarity 100.0%; Pred. No. 6e-170;
Matches 392; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDTIFLWSLLLLFFGSGAQRCSAQKNTFAVDLYQEVSLSHKDNIIFSPLGITLVLEMVQ 60
Db 1 MDTIFLWSLLLLFFGSGAQRCSAQKNTFAVDLYQEVSLSHKDNIIFSPLGITLVLEMVQ 60
QY 61 LGAKGKAQQOIRQLKQOETSAGBEFLVLKSFCSAISEKKQOETFNLANALYLOEGFTVK 120
Db 61 LGAKGKAQQOIRQLKQOETSAGBEFLVLKSFCSAISEKKQOETFNLANALYLOEGFTVK 120
QY 121 EQYLHGNKEFFQSAIKLVDFQDAKACAEMISTWVERKTDGKIKDMFSGBEFGPLRLVLV 180
Db 121 EQYLHGNKEFFQSAIKLVDFQDAKACAEMISTWVERKTDGKIKDMFSGBEFGPLRLVLV 180
QY 181 NAIYFKGDWKQKFRKEDTQLINFTKNGSTVKIPMKALLRTKYGYFSSSLNYQVLELS 240
Db 181 NAIYFKGDWKQKFRKEDTQLINFTKNGSTVKIPMKALLRTKYGYFSSSLNYQVLELS 240
QY 241 YKGDEFSLIILPAEGMDIEBEVKLITAQOILKWLSEMOBEEVEISLPRFKVEQKVDKFD 300
Db 241 YKGDEFSLIILPAEGMDIEBEVKLITAQOILKWLSEMOBEEVEISLPRFKVEQKVDKFD 300
QY 301 VLYSLNITEIFSGGCDLSGITDSSEVYVSQVTKVFFNEEDGSEAAATSTGIHIPVIMSL 360
Db 301 VLYSLNITEIFSGGCDLSGITDSSEVYVSQVTKVFFNEEDGSEAAATSTGIHIPVIMSL 360
QY 361 AQSOFTIANHPELFIMKHNPTESILFMGRVTNP 392
Db 361 AQSOFTIANHPELFIMKHNPTESILFMGRVTNP 392

RESULT 10
ADO19298
ID ADO19298 standard; protein; 405 AA.
XX
AC ADO19298;
XX
XX 26-AUG-2004 (first entry)
XX
DE Human soft tissue sarcoma-upregulated protein - SEQ ID 2117.
XX
XX soft tissue sarcoma; cytostatic; gene therapy; vaccine; screening; human.
XX Homo sapiens.
XX WO2004048938-A2.
XX
XX 10-JUN-2004.
XX
XX 26-NOV-2003; 2003WO-US038193.
XX
XX 26-NOV-2002; 2002US-0429739P.
XX
XX (PROT-) PROTEIN DESIGN LABS INC.
XX
XX Aziz N, Ginsburg WM, Zlotnik A;
XX WPI; 2004-441208/41.
XX
XX Early detection of soft tissue sarcoma comprises determining expression
XX of a gene in a first soft tissue sample and a normal soft tissue sample
XX and comparing the gene expression, also useful in treating soft tissue
XX sarcoma.
XX
XX Example 2; SEQ ID NO 2117; 210pp; English.
XX
XX The invention relates to a novel method for detecting soft tissue sarcoma
CC
```

CC which comprises obtaining a first soft tissue sample from an individual
 CC and a normal soft tissue sample from the same or different individual,
 CC determining the expression of a gene in both samples and comparing the
 CC expression of the gene in both soft tissue samples, where a higher level
 CC of protein expression in the first soft tissue sample indicates the
 CC presence of soft tissue sarcoma. The method of the invention has
 CC cytostatic applications and may be useful for detecting soft tissue
 CC sarcoma, possibly via gene therapy or vaccine production. The nucleic
 CC acid sequences may be useful in diagnostic and screening applications.
 CC The current sequence is that of a human soft tissue sarcoma-upregulated
 CC protein of the invention. The current sequence is not shown within the
 CC specification per se but was submitted in CD format by the inventor.

XX Sequence 405 AA;

Query Match 99.2%; Score 1972; DB 8; Length 405;
 Best Local Similarity 99.5%; Pred. No. 1.3e-168;
 Matches 390; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 MDTIFLWSLLLLPFGSOASRCSAQKNTPEFAVDLYQEVSLSHKDNIIIFSPGLITLVLEWQ 60
 DB 1 MDTIFLWSLLLLPFGSOASRCSAQKNTPEFAVDLYQEVSLSHKDNIIIFSPGLITLVLEWQ 60
 QY 61 LGAKGKAQQIIRQLKQETSAQEELVLSKSAISEKKEFTFNLANALYLQEGFTVK 120
 DB 61 LGAKGKAQQIIRQLKQETSAQEELVLSKSAISEKKEFTFNLANALYLQEGFTVK 120
 QY 121 EQLHGNKEFPQSAIKLVDFQDAKACAEIMSTWVERKTGKI KDMFSGEEFGPLTRVLV 180
 DB 121 EQLHGNKEFPQSAIKLVDFQDAKACAEIMSTWVERKTGKI KDMFSGEEFGPLTRVLV 180
 QY 181 NAIYFGKDWKQKPKEDTQLINTFKNGSTVKIPMKALLRTKYGFSESSLYQVLELS 240
 DB 181 NAIYFGKDWKQKPKEDTQLINTFKNGSTVKIPMKALLRTKYGFSESSLYQVLELS 240
 QY 241 YGDEPFLIIILPAEGMDI BEVEKLITAOQILKWLSEMOEEVEISLPRFKVQKVDKFD 300
 DB 241 YGDEPFLIIILPAEGMDI BEVEKLITAOQILKWLSEMOEEVEISLPRFKVQKVDKFD 300
 QY 301 VLVSINITEIFSGGCDLSGITDSSEVYVSVQTKVFPFNEEDGSEATSTGIHIPVIMSL 360
 DB 301 VLVSINITEIFSGGCDLSGITDSSEVYVSVQTKVFPFNEEDGSEATSTGIHIPVIMSL 360
 QY 361 AQSQFIANHPFLFMKHNPTESILFMGRVTNP 392
 DB 361 AQSQFIANHPFLFMKHNPTESILFMGRVTNP 392

RESULT 11

AA01601
 ID AA01601 standard; protein; 405 AA.

XX AA01601;

DT 18-JUN-1999 (first entry)

XX Protein encoded by the human pancrin gene.

XX Human pancrin gene; serine protease inhibitor; serpin; gene therapy;
 XX cancer treatment; pancreatic cancer; tumour.

OS Homo sapiens.

PN WO9911786-A1.

XX 11-MAR-1999.

XX 28-AUG-1998; 98WO-JP003841.

XX 01-SEP-1997; 97JP-00252770.

XX 10-FEB-1998; 98JP-00044312.

XX (SAXA) OTSUKA PHARM CO LTD.

XX Ozaki K, Nagata M, Fujiwara T, Hirano H, Kyushiki H, Okamoto T;
 PI Niimi M;
 XX WPI; 1999-205189/17.
 DR N-PSDB; AAX26705.
 XX Drug compositions, useful for, e.g. gene therapy with efficacious
 PT treatment of pancreatic cancer and inhibition of its metastasis.
 XX Claim 1; Page 98-100; 112pp; Japanese.

CC The present sequence is encoded by a human pancrin gene. The pancrin gene
 CC encodes a protein homologous to the serine protease inhibitor of serpin.
 CC The products may be used for gene therapy, e.g. in treatment of cancers.
 CC The pancrin gene can be formulated into a drug composition for gene
 CC therapy of pancreatic cancer/tumour and for inhibition of its metastasis
 CC to suppress further malignant transformation and proliferation. Such
 CC genes can also be applied in clarifying, diagnosing, preventing and
 CC treating pancreatic cancer and its metastasis
 XX Sequence 405 AA;

Query Match 99.0%; Score 1968; DB 2; Length 405;
 Best Local Similarity 99.2%; Pred. No. 3.1e-168;
 Matches 389; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 MDTIFLWSLLLLPFGSOASRCSAQKNTPEFAVDLYQEVSLSHKDNIIIFSPGLITLVLEWQ 60
 DB 1 MDTIFLWSLLLLPFGSOASRCSAQKNTPEFAVDLYQEVSLSHKDNIIIFSPGLITLVLEWQ 60
 QY 61 LGAKGKAQQIIRQLKQETSAQEELVLSKSAISEKKEFTFNLANALYLQEGFTVK 120
 DB 61 LGAKGKAQQIIRQLKQETSAQEELVLSKSAISEKKEFTFNLANALYLQEGFTVK 120
 QY 121 EQLHGNKEFPQSAIKLVDFQDAKACAEIMSTWVERKTGKI KDMFSGEEFGPLTRVLV 180
 DB 121 EQLHGNKEFPQSAIKLVDFQDAKACAEIMSTWVERKTGKI KDMFSGEEFGPLTRVLV 180
 QY 181 NAIYFGKDWKQKPKEDTQLINTFKNGSTVKIPMKALLRTKYGFSESSLYQVLELS 240
 DB 181 NAIYFGKDWKQKPKEDTQLINTFKNGSTVKIPMKALLRTKYGFSESSLYQVLELS 240
 QY 241 YGDEPFLIIILPAEGMDI BEVEKLITAOQILKWLSEMOEEVEISLPRFKVQKVDKFD 300
 DB 241 YGDEPFLIIILPAEGMDI BEVEKLITAOQILKWLSEMOEEVEISLPRFKVQKVDKFD 300
 QY 301 VLVSINITEIFSGGCDLSGITDSSEVYVSVQTKVFPFNEEDGSEATSTGIHIPVIMSL 360
 DB 301 VLVSINITEIFSGGCDLSGITDSSEVYVSVQTKVFPFNEEDGSEATSTGIHIPVIMSL 360
 QY 361 AQSQFIANHPFLFMKHNPTESILFMGRVTNP 392
 DB 361 AQSQFIANHPFLFMKHNPTESILFMGRVTNP 392

RESULT 12

AA06202
 ID AA06202 standard; protein; 406 AA.

XX AA06202;

DT 12-FEB-1997 (first entry)

XX Human pancreas-derived serpin.

XX Pancreas-derived serpin; PDS; serine protease inhibitor; pancreatitis;
 XX inflammation; anti-inflammatory; diagnosis; therapy.

OS Homo sapiens.

XX WO9634957-A1.

PN

```
PD 07-NOV-1996.
XX
PF 01-MAY-1996; 96WO-US006137.
XX
PR 02-MAY-1995; 95US-00434881.
XX
XX (INCY-) INCYTE PHARM INC.
XX
XX Braxton SM, Wilde CG, Diep D;
PI WPI; 1996-518311/51.
DR N-PSDB; AAT42978.
XX
XX DNA encoding pancreas derived serpin - useful in diagnosis and treatment
PT of pancreatic inflammation and disease.
XX
XX Claim 1; Page 24-26; 36pp; English.
XX
XX Human pancreas-derived serpin (PDS) (AAW06202) is a novel serine protease
XX inhibitor that is expressed specifically in the pancreas. It is the
XX product of a cDNA clone (AAT42978) obtd. from a human pancreas library.
XX Recombinant PDS can be produced in transformed host cells. The host cells
XX or isolated PDS can be used to screen for cpds. that modulate PDS
XX activity. PDS can be used as a specific protease inhibitor to treat viral
XX infections, endotoxin or exotoxin poisoning, ischaemia, anoxia, direct
XX trauma and other physiological or pathological conditions of the
XX pancreas
XX
XX Sequence 406 AA;
Query Match 91.8%; Score 1823.5; DB 2; Length 406;
Best Local Similarity 92.4%; Pred. No. 3.1e-155;
Matches 366; Conservative 9; Mismatches 14; Indels 7; Gaps 2;
QY 1 MDITFLWSLLLPFGSQASCSAQKNTPEAVDLYQVSLSHKDNITFSPGLGTLVLEMQ 60
DB 1 MDITFVWSLLLPFGSQASCSAQKNTPEFGVDLYQVSLSHKDNITFSPGLGTLVLEMQ 60
QY 61 LGAKGAAQQIQTLLQKQETSAGEEFLVLKFSFSAISEKKQKQETFTNLALYL----QEG 116
DB 61 LGAKGAAQQIQTLLQKQETSAGEEFLTEVFSLPSQKNK--NLHLILPMPSQEG 117
QY 117 FTVKEQYLHGNKEFFQSAILKLVDFQAKACAEMISTWVERKTDGKIKDFSGEEFGPLTR 176
DB 118 FTVKEQYLHGNKEFFQSAILKLVDFQAKACAGMISTWVERKTDGKIKDFSGEEFGPLTR 177
QY 177 LVLVNAIFYKGDWKQFRKEDTQILNFTKXGSGTVKIPMKALLRTKYGYFSESSLNQV 236
DB 178 LVLVNAIFYKGDWKQFRKEDTQILNFTKXGSGTVKIPMKALLRTKYGYFSESSLNQV 237
QY 237 LELSYKGDEFSLLIILPAEGMDIEVEKELITAOQILKWLSEMEEVEISLPRFKVEQKV 296
DB 238 LELSYKGDEFSLLIILPAEGMDIEVEKELITAOQILKWLSEMEEVEISLPRFKVEQKV 297
QY 297 DFKDVLVSLNITIFSGGCDLSGITDSSEVVYVSCVTQKVPFEINEDGSAANTSTGHIHV 356
DB 298 DFKDVLVSLNITIFSGGCDLSGITDSSEVVYVSCVTQKVPFEINEDGSAANTSTGHIHV 357
QY 357 IMSLAQSQFIANHPFLFIMXHNPTESILFMGRVTNP 392
DB 358 IMSLAQSQFIANHPFLFIMXHNPTESILFMGRVTNP 393
RESULT 13
AAW60054
ID AAW60054 standard; protein; 410 AA.
XX
AC AAW60054;
XX
XX 21-AUG-1998 (first entry)
XX
XX Brain-associated inhibitor of tissue plasminogen activator (BAIT).
```

```
KW Brain-associated inhibitor of tissue plasminogen activator; BAIT; tPA;
KW treatment; diagnosis; neurological disease; serpin; Alzheimer's disease;
XX tissue plasminogen activator; human.
XX
XX Homo sapiens.
XX
XX OS
XX Key Location/Qualifiers
XX Peptide 1..18
XX /note= "signal peptide"
XX Protein 19..410
XX /note= "mature protein"
XX
XX WO9816643-A1.
XX
XX 23-APR-1998.
XX
XX 11-OCT-1996; 96WO-US016484.
XX
XX 11-OCT-1996; 96WO-US016484.
XX (HUMA-) HUMAN GENOME SCI INC.
XX
XX Hastings GA, Lawrence DA, Coleman TA, Dillon RJ;
XX WPI; 1998-251290/22.
XX N-PSDB; AAV34532.
XX
XX New nucleic acid encoding brain associated inhibitor of tissue
XX plasminogen activator - and related vectors, transformed cells,
XX poly(peptide)s, antibodies and inhibitors, useful for treating and
XX diagnosing neurological disease and modulating activity of plasminogen
XX activator.
XX
XX Claim 3; Fig 1A-B; 103pp; English.
XX
XX This represents a brain-associated inhibitor of tissue plasminogen
XX activator (BAIT) polypeptide. BAIT is a member of the serpin superfamily,
XX expressed mainly in brain tissue and probably the human analogue of
XX chicken neuroserpin. It inhibits tissue plasminogen activator (tPA)
XX selectively, with little effect on trypsin, thrombin or urokinase. The
XX BAIT gene is located at chromosome 4q31.2-31.3 in humans. BAIT is a
XX regulator (inhibitor) of serine proteases and may be involved in
XX disorders related to haemostasis, angiogenesis, tumour metastasis,
XX cellular migration, ovulation and neurogenesis. It is used to identify
XX specific inhibitors or enhancers. It can be therapeutically useful in
XX cases where endogenous BAIT activity is insufficient, e.g. amyotrophic
XX lateral sclerosis, motor neuron damage caused by spinal cord injury, and
XX Alzheimer's disease. BAIT is used to modulate tPA where this is being
XX used as a thrombolytic agent or where it is expressed from neural
XX tumours. Since altered levels of BAIT are associated with some diseases
XX of the central and peripheral nervous systems, monitoring expression of
XX the BAIT gene can be used diagnostically to detect impaired learning and
XX memory, including in cases of Alzheimer's disease. Other uses of BAIT
XX polypeptides are as molecular weight markers, for generating antibodies
XX and in yeast two-hybrid assays to capture specific binding proteins.
XX Antibodies that bind specifically to BAIT or its fragments are useful as
XX immunoassay and in vivo imaging agents, and also for polypeptide
XX purification. The BAIT encoding nucleic acid and probes and primers
XX derived from it are used for gene mapping, for detecting BAIT gene
XX expression and for isolation of related and variant genes
XX
XX Sequence 410 AA;
Query Match 39.8%; Score 791.5; DB 2; Length 410;
Best Local Similarity 39.5%; Pred. No. 2.3e-62;
Matches 155; Conservative 97; Mismatches 135; Indels 5; Gaps 2;
QY 6 LWSLLLLPFGSQASCSAQKNTPEAVDLYQVSLSHKDNITFSPGLGTLVLEMQVCAK 64
DB 6 LFSLLVLSQMATGATFFPEEAIADLSVNMYNELRATGEDNITFSPLSIALAMGMELCAQ 65
QY 65 GKAAQQIQTLLKQKQETSAGEEFLVLKFSFSAISEKKQKQETFTNLALYLQEGFTVKEQYL 124
XX
```

66	Db	GSTQBEIRHSMGYDLSKNGEEFFSLKFSNVMVTAKESQYVMKJANSLFVONGHVNNEEP	125
125	QY	HGNKEFFFOSAIKLXVFDQAKACAEISMISTWVERKTDGKIKDMFGSEBFGPLTRLVLVNAVY	184
126	Db	QMWKVFNAAVNVHDFSQNVAVANVKNWENTNNLVKDLVSPROFDAATYLAALNAVY	185
185	QY	FKGDNMKQFKEREDTOLINFTKNGSTWKIPMKALLRTKYGSEBSLN----	240
186	Db	FKGNWKSQFRPENTRTFTSKDDESEVOIPMMYQQGFEFFYGESDSNBSAGGIYQVLEIP	245
241	QY	YKGDFFSLIILPAEGMDIBEVKLLTAQOITLKWSEMQEEVEISLPRFKVQKVDXK	300
246	Db	YEGDEISMMVLVSROEVELATLEPLVKAQLVEEWANSVKQKVEVYLPRAFTVEQEDLXD	305
301	QY	VLYSLNITEIPSGGCDLSGITSDEVVVSQVTKVPEINEDGEAATSGIHPIVNSL	360
306	Db	VUKALGITEIPTKDANLTGLSDNKEIPLSKAIHKSFLVNEBGEAAAVSGMIAISRMAV	365
361	QY	AOSQIANHPFLFIMKHNPTEISIFMGVRTNP	392
366	Db	LYPOVIVDPHPPFFFLRNPRPTCTILFMGRVMP	397

RESULT 14
AAY31663
ID AAY31663 standard; protein; 410 AA.

Key	Location/Qualifiers
FT Peptide	1..16 /note= "signal peptide"
FT Protein	17..410
FT Domain	/note= "mature protein"
FT FT	327..360
FT FT	/note= "reactive site loop"

XX	WO9941381-A1.
XX	
XX	19-AUG-1999.
XX	
XX	12-FEB-1999; 99WO-IB000348.
XX	
XX	13-FEB-1998; 98US-00023129.
XX	
XX	(SOND/) SONDEREGGER P.

PI Sonderegger P, Schrimpf SP, Krueser SR, Osterwalder T;
 PI Stoeckli ET;
 PI XX
 DR WPI; 1999-518451/43.
 DR N-PSDB: AX87830.
 DR

XX Novel neuroserpins useful for treating central nervous system disorders
PT or brain or retinal tumors.
PT
XX
PS Claim 3: Page 3-5: 55pp: English.

The present sequence represents human neuroserpin, as deduced from cDNA (see AX87830) isolated from human foetal brain and foetal retina cDNA libraries. Neuroserpins can be used in the treatment of disorders of the central nervous system, especially disorders of a protease, such as a tissue-type or urokinase-type plasminogen activator (claimed); to minimise tissue destruction in stroke (claimed) including brain

infarction and ischaemia, intracerebral haemorrhage and subarachnoid haemorrhage, by exerting a protecting effect; to prevent cell death of cells of the nervous system (claimed); to treat tissue damage in traumatic brain injury; to treat neurodegenerative or neuroinflammatory diseases such as multiple sclerosis; to reduce the effects of epilepsy on brain tissue; to rescue endangered neurons e.g. in epileptic seizures and cancerous neoformations; for axonal regeneration and/or restoration of synaptic integrity and function; to prevent or cure retinal degeneration or neuroangiogenesis; to regenerate injured, damaged, underdeveloped or maldeveloped brain tissue and/or nervous tissue; to treat pain; to treat psychiatric disorders such as schizophrenia; to treat tumors, including the prevention or reduction of the growth, expansion, infiltration and the metastasis of primary and metastatic tumors, especially brain tumors or tumors of the retina (claimed); and to ameliorate learning and memory functions. Neuroserpin proteins and DNA can also be used for the screening of drugs against neuroserpin involving disorders, to produce antigens and hence raise antibodies, and in the creation of transgenic animals

RESULT 15	
AAAY67239	
ID	AAAY67239 standard; protein; 410 AA.
XX	
AC	AAAY67239;
XX	
DT	27-MAR-2000 (first entry)
DE	Brain-Associated Inhibitor of Tissue-Type Plasminogen Activator protein.
DE	
KW	Brain-associated inhibitor of tissue-type plasminogen activator; BAIT;
KW	serpin; serine protease inhibitor; brain; human; Alzheimer's disease;
KW	peripheral neuropathy, multiple sclerosis; memory impairment.
XX	
OS	Homo sapiens.
XX	
Key	Location/Qualifiers
FF	1..18
FT	/label= signal peptide
FT	

FT Protein 19. .410
XX /label= BAIT
DN US6008020-A.
XX 28-DEC-1999.
XX
XX 10-OCT-1997; 97US-00948997.
XX
XX 11-OCT-1996; 96US-0028117P.
XX
XX (HUMA-) HUMAN GENOME SCI.
PA (AMNA-) AMERICAN NAT RED CROSS.
XX
XX Lawrence DA, Dillon PJ, Hastings GA, Coleman TA;
PI
XX MPI; 2000-096374/08.
DR N-PSDB; AAZ56164.
XX
XX New nucleic acid encoding human brain-associated inhibitor of tissue-type
PT plasminogen activator, useful in the diagnosis of various nervous system-
PT related disorders in mammals.
XX
XX Claim 1; Fig 1; 48pp; English.
XX
XX This is the human brain-associated inhibitor of tissue-type plasminogen
CC activator (BAIT) amino acid sequence. BAIT is a member of the serine
CC protease inhibitor (serpin) family of proteins, and is widely distributed
CC throughout the brain, but is primarily located in the neurons. A
CC recombinant vector containing the BAIT nucleotide sequence can be used to
CC produce a host cell that produces BAIT polypeptide. The BAIT protein
CC selectively inhibits tissue-type plasminogen activator. The BAIT
CC polynucleotides and polypeptides are useful in the diagnosis of various
CC nervous system-related disorders in mammals which include impaired
CC processes of learning and memory. The impaired spatial, olfactory and
CC taste aversion learning, learning and memory impairments associated with
CC Alzheimer's disease can be diagnosed using the BAIT sequences. BAIT
CC polypeptides and agonists are used for treating an individual in need of
CC an increased level of BAIT activity. BAIT agonists are also useful for
CC treating Alzheimer's disease and peripheral neuropathies such as multiple
CC sclerosis. Motor neuron or sensory neuron damage resulting from spinal
CC cord injury may also be prevented or treated with BAIT agonists. BAIT
CC antagonists can be used for treating an individual in need of a decreased
CC level of BAIT activity
XX
SQ Sequence 410 AA;

Query Match 39.8%; Score 791.5; DB 3; Length 410;
Best Local Similarity 39.5%; Pred. No. 2.3e-62;
Matches 155; Conservative 97; Mismatches 135; Indels 5; Gaps 2;

QY 6 LWSILLFFGSGQSRCAQNTPEFVLDYQEVLSHKD-NIIFSPILGITIVLEWVGLGAK 64
DB 6 LFSLLVLQSWATGATPFEEAIDLSVMNVRNRATGEDENILFSPISIALAMGMELGAQ 65
QY 65 GKAOQQIRQTLKQOETSAGBEFLVLSFCSAISEKIQEFTFNLANALYLQEGFTVKEQYL 124
DB 66 GSTQKEIRHSMGVDSLKNGEFSFLKEFSNMVTAKESQYVMKIANSLFVQNGEHNVEEL 125
QY 125 HGNKEFTQSAIKLVDPDAKACAEIMSTWVERTKDGKIDMFSGEEFGPLTRLVLVNAIY 184
DB 126 QMKKYENAAVNHVDFSQNAVANYINKVENNTNNLVKDLVSPDFDAATYALINAVY 185
QY 185 FKGDWKQFKRKEDPOLNFTKNGSTVKIPMKALLRTKYGFSESSLN---YQVLELS 240
DB 186 FGNWKSQFPENRTFTFKDDESEVOIPMTQOGEFFYGFSGSNEAGGIYQVLEIP 245
QY 241 YGDEFSLIILPAEGMDIEBEVKLITPAQQLKWLSEMQEVEEISLPFPKVEQKVDK 300
DB 246 YEGDEISMWLVLSKQEVPLATLEPLVKAQLVEEWANSVKQKQEVYLPRTVEQEI 305
QY 301 VLYSLNITEIFSGGCDLSGDTSDSEVYVSQVTKVFEINEDGSEATSTGHIPIVMSL 360
DB 301 VLYSLNITEIFSGGCDLSGDTSDSEVYVSQVTKVFEINEDGSEATSTGHIPIVMSL 360

Db 306 VLKALGITEIFIKDANLTGLSDNKEIFLSKAIHKSFLFVNEEGSEAAVSGWIAISRMAV 365
QY 361 ACSQFIANHPFLFIMKENPTESILFMGRVTNP 392
Db 366 LYPQVIVDHPFFFLIRNRRTGTILFMGRVMHP 397

Search completed: October 21, 2004, 06:42:08
Job time : 72 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 21, 2004, 06:45:37 ; Search time 131 Seconds

(without alignments)
968.804 Million cell updates/sec

Title: US-10-628-395-2

Perfect score: 1987

Sequence: 1 MDITFILSLLFFGQASR.....FMKHNPESILFMGRVTNP 392

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1364641 seqs, 323758627 residues

Total number of hits satisfying chosen parameters: 1364641

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA.*
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2: /cgn2_6/ptodata/1/pubpaa/pct_NEW PUB.pep.*
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19: /cgn2_6/ptodata/1/pubpaa/us60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1987	100.0	392	9	US-09-902-684-2
2	1987	100.0	392	15	US-10-628-395-2
3	1987	100.0	405	9	US-09-902-684-13
4	1987	100.0	405	15	US-10-628-395-13
5	791.5	39.8	410	9	US-09-957-485-2
6	791.5	39.8	410	9	US-09-987-021-2
7	791.5	39.8	410	15	US-10-355-208-2
8	791.5	39.8	410	17	US-10-752-041-2
9	788.5	39.7	410	9	US-09-957-485-3
10	788.5	39.7	410	9	US-09-987-021-3
11	788.5	39.7	410	15	US-10-355-208-3
12	788.5	39.7	410	17	US-10-752-041-3
13	706	35.5	360	14	US-10-023-634-88
14	706	35.5	360	15	US-10-037-417-67

15	679.5	34.2	377	10	US-09-823-187-31	Sequence 31, Appl
16	673.5	33.9	371	14	US-10-023-634-87	Sequence 87, Appl
17	673.5	33.9	377	15	US-10-037-417-66	Sequence 66, Appl
18	656	33.0	390	8	US-08-731-566-2	Sequence 2, Appl
19	650	32.7	390	10	US-09-823-187-29	Sequence 29, Appl
20	649	32.7	390	10	US-09-823-187-30	Sequence 30, Appl
21	649	32.7	390	14	US-10-094-944-12	Sequence 12, Appl
22	649	32.7	390	15	US-10-037-417-65	Sequence 65, Appl
23	649	32.7	390	16	US-10-652-705-3	Sequence 3, Appl
24	649	32.7	390	16	US-10-766-778-9	Sequence 9, Appl
25	636	32.0	390	10	US-09-823-187-27	Sequence 27, Appl
26	636	32.0	390	14	US-10-094-944-13	Sequence 13, Appl
27	636	32.0	390	14	US-10-295-027-177	Sequence 177, Appl
28	636	32.0	390	14	US-10-295-027-794	Sequence 794, Appl
29	636	32.0	390	16	US-10-652-705-4	Sequence 4, Appl
30	636	32.0	390	16	US-10-766-778-10	Sequence 10, Appl
31	636	32.0	390	10	US-09-823-187-28	Sequence 28, Appl
32	611.5	30.8	379	14	US-10-023-634-85	Sequence 85, Appl
33	611.5	30.8	395	10	US-09-823-187-2	Sequence 2, Appl
34	609.5	30.7	379	14	US-10-023-634-86	Sequence 86, Appl
35	607	30.5	394	15	US-10-258-951-59	Sequence 59, Appl
36	604	30.4	378	14	US-10-023-634-84	Sequence 84, Appl
37	603.5	30.4	405	14	US-10-023-634-82	Sequence 82, Appl
38	598	30.1	378	15	US-10-467-042-15	Sequence 15, Appl
39	595	29.9	459	9	US-09-925-300-1440	Sequence 1440, Ap
40	591.5	29.8	425	14	US-10-113-113-2	Sequence 2, Appl
41	591.5	29.8	425	14	US-10-094-944-2	Sequence 2, Appl
42	591.5	29.8	425	14	US-10-419-277-2	Sequence 2, Appl
43	588	29.6	392	14	US-10-198-070-67	Sequence 67, Appl
44	587	29.5	392	14	US-10-198-070-70	Sequence 70, Appl
45	582	29.3	392	14	US-10-198-070-62	Sequence 62, Appl

ALIGNMENTS

RESULT 1

US-09-902-684-2
; Sequence 2, Application US/09902684
; Patent No. US20020127640A1
; GENERAL INFORMATION:
; APPLICANT: Ni et al.
; TITLE OF INVENTION: PANCREAS-DERIVED PLASMINOGEN ACTIVATOR
; INHIBITOR
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESS: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
; STREET: 1100 NEW YORK AVENUE, SUITE 600
; CITY: WASHINGTON
; STATE: DC
; COUNTRY: USA
; ZIP: 20005-3934
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/902,684
; FILING DATE: 12-Jul-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/026,408
; FILING DATE: <Unknown>
; APPLICATION NUMBER: US 60/024,056
; FILING DATE: 16-AUG-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: STEFFE, ERIC K.
; REGISTRATION NUMBER: 36,688
; REFERENCE/DOCKET NUMBER: 1488.0300002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-371-2600
; TELEFAX: 202-371-2540

INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 392 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-902-684-2

Query Match 100.0%; Score 1987; DB 9; Length 392;
Best Local Similarity 100.0%; Pred. No. 6.5e-156;
Matches 392; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 61 LGAKGKAQQIROTLLKQETSAGEEFLVLSKFCSAISEKKQETFFNLANALYQEGFTVK 120
DB 61 LGAKGKAQQIROTLLKQETSAGEEFLVLSKFCSAISEKKQETFFNLANALYQEGFTVK 120

QY 121 EQLHGKKEFFQSAIKLVDFQDQAKAEMISTWVERKTGKIKDMPSEGEFGLTRVLV 180
DB 121 EQLHGKKEFFQSAIKLVDFQDQAKAEMISTWVERKTGKIKDMPSEGEFGLTRVLV 180

QY 181 NAIYFGDMQKQKREDTQLINFTKNGSTVKIPMMKALLRTKYGYFSSSLNYQVLELS 240
DB 181 NAIYFGDMQKQKREDTQLINFTKNGSTVKIPMMKALLRTKYGYFSSSLNYQVLELS 240

QY 241 YKDEFSLLIILPAEGMDIEVEKLITAOQILKWLSEMOEEVEISLPRFKVEQKVDK 300
DB 241 YKDEFSLLIILPAEGMDIEVEKLITAOQILKWLSEMOEEVEISLPRFKVEQKVDK 300

QY 301 VLXSLNITEIFSGCDLSGITDSSEVYVSVQTKVFFNEGSEAATSTGHIPIVMSL 360
DB 301 VLXSLNITEIFSGCDLSGITDSSEVYVSVQTKVFFNEGSEAATSTGHIPIVMSL 360

QY 361 AQSQFANHPFLFMKHNPTESILFMGRVTNP 392
DB 361 AQSQFANHPFLFMKHNPTESILFMGRVTNP 392

RESULT 2
US-10-628-395-2
; Sequence 2, Application US/10628395
; Publication No. US20040086978A1
; GENERAL INFORMATION:
; APPLICANT: Ni et al.
; TITLE OF INVENTION: PANCREAS-DERIVED PLASMINOGEN ACTIVATOR
; INHIBITOR
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
; STREET: 1100 NEW YORK AVENUE, SUITE 600
; CITY: WASHINGTON
; STATE: DC
; COUNTRY: USA
; ZIP: 20005-3934
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/628,395
; FILING DATE: 29-Jul-2003
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/026,408
; FILING DATE: 19-FEB-2001
; APPLICATION NUMBER: US 08/934,011
; FILING DATE: 15-AUG-1997
; APPLICATION NUMBER: US 60/024,056

FILING DATE: 16-AUG-1996
ATTORNEY/AGENT INFORMATION:
NAME: STEFFE, ERIC K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488.0300002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 392 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-628-395-2

Query Match 100.0%; Score 1987; DB 15; Length 392;
Best Local Similarity 100.0%; Pred. No. 6.5e-156;
Matches 392; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDIFLWSLLLLPFGSQASCSAQKNTFAVDLYQVSLSHKDNIIFFSLGITLVLEWVQ 60
DB 1 MDIFLWSLLLLPFGSQASCSAQKNTFAVDLYQVSLSHKDNIIFFSLGITLVLEWVQ 60

QY 61 LGAKGKAQQIROTLLKQETSAGEEFLVLSKFCSAISEKKQETFFNLANALYQEGFTVK 120
DB 61 LGAKGKAQQIROTLLKQETSAGEEFLVLSKFCSAISEKKQETFFNLANALYQEGFTVK 120

QY 121 EQLHGKKEFFQSAIKLVDFQDQAKAEMISTWVERKTGKIKDMPSEGEFGLTRVLV 180
DB 121 EQLHGKKEFFQSAIKLVDFQDQAKAEMISTWVERKTGKIKDMPSEGEFGLTRVLV 180

QY 181 NAIYFGDMQKQKREDTQLINFTKNGSTVKIPMMKALLRTKYGYFSSSLNYQVLELS 240
DB 181 NAIYFGDMQKQKREDTQLINFTKNGSTVKIPMMKALLRTKYGYFSSSLNYQVLELS 240

QY 241 YKDEFSLLIILPAEGMDIEVEKLITAOQILKWLSEMOEEVEISLPRFKVEQKVDK 300
DB 241 YKDEFSLLIILPAEGMDIEVEKLITAOQILKWLSEMOEEVEISLPRFKVEQKVDK 300

QY 301 VLXSLNITEIFSGCDLSGITDSSEVYVSVQTKVFFNEGSEAATSTGHIPIVMSL 360
DB 301 VLXSLNITEIFSGCDLSGITDSSEVYVSVQTKVFFNEGSEAATSTGHIPIVMSL 360

QY 361 AQSQFANHPFLFMKHNPTESILFMGRVTNP 392
DB 361 AQSQFANHPFLFMKHNPTESILFMGRVTNP 392

RESULT 3
US-09-902-684-13
; Sequence 13, Application US/09902684
; Patent No. US20020127640A1
; GENERAL INFORMATION:
; APPLICANT: Ni et al.
; TITLE OF INVENTION: PANCREAS-DERIVED PLASMINOGEN ACTIVATOR
; INHIBITOR
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
; STREET: 1100 NEW YORK AVENUE, SUITE 600
; CITY: WASHINGTON
; STATE: DC
; COUNTRY: USA
; ZIP: 20005-3934
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/902,684

FILING DATE: 12-Jul-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/026,408
FILING DATE: <Unknown>
APPLICATION NUMBER: US 60/024,056
FILING DATE: 16-AUG-1996
ATTORNEY/AGENT INFORMATION:
NAME: STEFFE, ERIC K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488.03000002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE DESCRIPTION: SEQ ID NO: 13:
US-09-902-684-13

Query Match 100.0%; Score 1987; DB 9; Length 405;
Best Local Similarity 100.0%; Pred. No. 6.8e-156;
Matches 392; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDTIFLWSLLLLPFGSQARCSAQKNTFAVDLYQEVSLSHKDNIIFSPGLGTLVLEWVQ 60
DB 1 MDTIFLWSLLLLPFGSQARCSAQKNTFAVDLYQEVSLSHKDNIIFSPGLGTLVLEWVQ 60

QY 61 LGAGKGAQQIROTLLKQQTSAQKNTFAVDLYQEVSLSHKDNIIFSPGLGTLVLEWVQ 120
DB 61 LGAGKGAQQIROTLLKQQTSAQKNTFAVDLYQEVSLSHKDNIIFSPGLGTLVLEWVQ 120

QY 121 EQYLHGNKEFFQSAIKLVDFQDAKACAEIMSTWVERKTDGKIKDMFSGEEFGLTRVLV 180
DB 121 EQYLHGNKEFFQSAIKLVDFQDAKACAEIMSTWVERKTDGKIKDMFSGEEFGLTRVLV 180

QY 181 NAIYFGDWKQKPKEDTOLINFTKNGSTVKIPMKALLRTKYGFSESSLYQVLELS 240
DB 181 NAIYFGDWKQKPKEDTOLINFTKNGSTVKIPMKALLRTKYGFSESSLYQVLELS 240

QY 241 YKGDEFSLIILPAEGMDIEVEKLITAAQILKWLSEMQEEVEISLPRKVEQKVDPK 300
DB 241 YKGDEFSLIILPAEGMDIEVEKLITAAQILKWLSEMQEEVEISLPRKVEQKVDPK 300

QY 301 VLYSLNITEIFSGGCDLSGTTDSSEVYVSVQTKVFFNEEDGSEAAATSGIHIPVIMSL 360
DB 301 VLYSLNITEIFSGGCDLSGTTDSSEVYVSVQTKVFFNEEDGSEAAATSGIHIPVIMSL 360

QY 361 AQSOFIANHPFLFMKHNPTESILFMGRVTNP 392
DB 361 AQSOFIANHPFLFMKHNPTESILFMGRVTNP 392

RESULT 4
US-10-628-395-13
Sequence 13, Application US/10628395
Publication No US20040086978A1
GENERAL INFORMATION:
APPLICANT: Ni et al.
TITLE OF INVENTION: PANCREAS-DERIVED PLASMINOGEN ACTIVATOR INHIBITOR
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERN, KESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 1100 NEW YORK AVENUE, SUITE 600
CITY: WASHINGTON
STATE: DC
COUNTRY: USA
ZIP: 20005-3934
COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/628,395
FILING DATE: 29-Jul-2003
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/026,408
FILING DATE: 19-FEB-2001
APPLICATION NUMBER: US 08/934,011
FILING DATE: 15-AUG-1997
APPLICATION NUMBER: US 60/024,056
FILING DATE: 16-AUG-1996
ATTORNEY/AGENT INFORMATION:
NAME: STEFFE, ERIC K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488.03000002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 405 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 13:
US-10-628-395-13

Query Match 100.0%; Score 1987; DB 15; Length 405;
Best Local Similarity 100.0%; Pred. No. 6.8e-156;
Matches 392; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDTIFLWSLLLLPFGSQARCSAQKNTFAVDLYQEVSLSHKDNIIFSPGLGTLVLEWVQ 60
DB 1 MDTIFLWSLLLLPFGSQARCSAQKNTFAVDLYQEVSLSHKDNIIFSPGLGTLVLEWVQ 60

QY 61 LGAGKGAQQIROTLLKQQTSAQKNTFAVDLYQEVSLSHKDNIIFSPGLGTLVLEWVQ 120
DB 61 LGAGKGAQQIROTLLKQQTSAQKNTFAVDLYQEVSLSHKDNIIFSPGLGTLVLEWVQ 120

QY 121 EQYLHGNKEFFQSAIKLVDFQDAKACAEIMSTWVERKTDGKIKDMFSGEEFGLTRVLV 180
DB 121 EQYLHGNKEFFQSAIKLVDFQDAKACAEIMSTWVERKTDGKIKDMFSGEEFGLTRVLV 180

QY 181 NAIYFGDWKQKPKEDTOLINFTKNGSTVKIPMKALLRTKYGFSESSLYQVLELS 240
DB 181 NAIYFGDWKQKPKEDTOLINFTKNGSTVKIPMKALLRTKYGFSESSLYQVLELS 240

QY 241 YKGDEFSLIILPAEGMDIEVEKLITAAQILKWLSEMQEEVEISLPRKVEQKVDPK 300
DB 241 YKGDEFSLIILPAEGMDIEVEKLITAAQILKWLSEMQEEVEISLPRKVEQKVDPK 300

QY 301 VLYSLNITEIFSGGCDLSGTTDSSEVYVSVQTKVFFNEEDGSEAAATSGIHIPVIMSL 360
DB 301 VLYSLNITEIFSGGCDLSGTTDSSEVYVSVQTKVFFNEEDGSEAAATSGIHIPVIMSL 360

QY 361 AQSOFIANHPFLFMKHNPTESILFMGRVTNP 392
DB 361 AQSOFIANHPFLFMKHNPTESILFMGRVTNP 392

RESULT 5
US-09-957-485-2
Sequence 2, Application US/09957485
Patent No. US20020143165A1
GENERAL INFORMATION:
APPLICANT: Human Genome Sciences, Inc. et al.
TITLE OF INVENTION: Brain-Associated Inhibitor of Tissue-Type Plasminogen Activator
FILE REFERENCE: PF336P1

; CURRENT APPLICATION NUMBER: US/09/957,485
 ; CURRENT FILING DATE: 2001-09-21
 ; PRIOR APPLICATION NUMBER: US 09/521,664
 ; PRIOR FILING DATE: 2000-03-08
 ; PRIOR APPLICATION NUMBER: US 60/123,704
 ; PRIOR FILING DATE: 1999-03-10
 ; NUMBER OF SEQ ID NOS: 21
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 2
 ; LENGTH: 410
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-09-957-485-2

Query Match 39.8%; Score 791.5; DB 9; Length 410;
 Best Local Similarity 39.5%; Pred. No. 5.8e-57;
 Matches 155; Conservative 97; Mismatches 135; Indels 5; Gaps 2;
 QY 6 LWSLLFFGQSARCSAQNTEFAVDLYQEVLSHKD-NIIFSPGLITLVLEMVQLGAK 64
 Db 6 LFSLLVLSQMATGATPPEAIAADLSVMYNNRNRATGDEENILFSPLSIALANGMELGAQ 65
 QY 65 GKAAQOIROTLLKQOETSAGEEFLVLSKSPCSAISSEKKEQFTFNLANALYLQEGFTVKEOYL 124
 Db 66 GSTQKEIRHSMGYDSLKNGEESFLKKEFSNNVTAKESQYVMKIANSLFVQNGFHVNEEFL 125
 QY 125 HGNKEFFQSAIKLVDFQDAXACAEIMSTWVERKTGKIKDMFSGEEFGPLTRLVVNAIY 184
 Db 126 QMKKYNFAAVNHVDFQNVAVANYINKVNNNTNNLVKDLVSPRDFDAATYLAJNAVY 185
 QY 185 FKGDWKQKPRKEDTQINFTKNGSVTKIPMKALLRTKYGYFSSSLN- ---YQVLELS 240
 Db 186 FKGNWKSQFPENRTFTSKDDESEVOIPMMYQQGEFYFGFSGSNEAGGIYQVLEIP 245
 QY 241 YKGFESLIILPAEGMDIEVEKLITAOQILKWLSEMOEVEEISLPRFKVEQKVDK 300
 Db 246 YEGDEISMVLVSRQEVPLATLEPLVKAQLVEBANSVKQKVEVYLPRTVEQEBIDLK 305
 QY 301 VLKSLNITEIFSGCDLSGITSSEVYVSVQVTKVFFNEEDGSEAASTGHIHPIVMSL 360
 Db 306 VLKALGITEIFKDALNTGLSDNKEIFLSKAHKSFLVNEEGSEAAVSGMIAISRMV 365
 QY 361 AQOQFIANHPFLFMKHNPTESILFMGRVTNP 392
 Db 366 LYPQVVDHPPFLIRNRRTGILFMGRVWHP 397

RESULT 6
 US-09-987-021-2
 ; Sequence 2, Application US/09987021
 ; Patent No. US20020165147A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Yipes, et al.
 ; TITLE OF INVENTION: Brain-Associated Inhibitor of Tissue-Type Plasminogen Activator
 ; FILE REFERENCE: PF336P2
 ; CURRENT APPLICATION NUMBER: US/09/987,021
 ; CURRENT FILING DATE: 2001-11-13
 ; PRIOR APPLICATION NUMBER: 09/957,485
 ; PRIOR FILING DATE: 2001-09-21
 ; PRIOR APPLICATION NUMBER: 09/722,292
 ; PRIOR FILING DATE: 2000-11-28
 ; PRIOR APPLICATION NUMBER: 60/247,971
 ; PRIOR FILING DATE: 2000-11-14
 ; PRIOR APPLICATION NUMBER: 09/521,664
 ; PRIOR FILING DATE: 2000-03-08
 ; PRIOR APPLICATION NUMBER: 09/348,817
 ; PRIOR FILING DATE: 1999-07-08
 ; PRIOR APPLICATION NUMBER: 60/123,704
 ; PRIOR FILING DATE: 1999-03-10
 ; PRIOR APPLICATION NUMBER: 08/948,997
 ; PRIOR FILING DATE: 1997-10-10
 ; PRIOR APPLICATION NUMBER: 60/028,117
 ; PRIOR FILING DATE: 1996-10-11

; NUMBER OF SEQ ID NOS: 18
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 2
 ; LENGTH: 410
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-09-987-021-2

Query Match 39.8%; Score 791.5; DB 9; Length 410;
 Best Local Similarity 39.5%; Pred. No. 5.8e-57;
 Matches 155; Conservative 97; Mismatches 135; Indels 5; Gaps 2;
 QY 6 LWSLLFFGQSARCSAQNTEFAVDLYQEVLSHKD-NIIFSPGLITLVLEMVQLGAK 64
 Db 6 LFSLLVLSQMATGATPPEAIAADLSVMYNNRNRATGDEENILFSPLSIALANGMELGAQ 65
 QY 65 GKAAQOIROTLLKQOETSAGEEFLVLSKSPCSAISSEKKEQFTFNLANALYLQEGFTVKEOYL 124
 Db 66 GSTQKEIRHSMGYDSLKNGEESFLKKEFSNNVTAKESQYVMKIANSLFVQNGFHVNEEFL 125
 QY 125 HGNKEFFQSAIKLVDFQDAXACAEIMSTWVERKTGKIKDMFSGEEFGPLTRLVVNAIY 184
 Db 126 QMKKYNFAAVNHVDFQNVAVANYINKVNNNTNNLVKDLVSPRDFDAATYLAJNAVY 185
 QY 185 FKGDWKQKPRKEDTQINFTKNGSVTKIPMKALLRTKYGYFSSSLN- ---YQVLELS 240
 Db 186 FKGNWKSQFPENRTFTSKDDESEVOIPMMYQQGEFYFGFSGSNEAGGIYQVLEIP 245
 QY 241 YKGFESLIILPAEGMDIEVEKLITAOQILKWLSEMOEVEEISLPRFKVEQKVDK 300
 Db 246 YEGDEISMVLVSRQEVPLATLEPLVKAQLVEBANSVKQKVEVYLPRTVEQEBIDLK 305
 QY 301 VLKSLNITEIFSGCDLSGITSSEVYVSVQVTKVFFNEEDGSEAASTGHIHPIVMSL 360
 Db 306 VLKALGITEIFKDALNTGLSDNKEIFLSKAHKSFLVNEEGSEAAVSGMIAISRMV 365
 QY 361 AQOQFIANHPFLFMKHNPTESILFMGRVTNP 392
 Db 366 LYPQVVDHPPFLIRNRRTGILFMGRVWHP 397

RESULT 7
 US-10-355-208-2
 ; Sequence 2, Application US/10355208
 ; Publication No. US20040038880A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Human Genome Sciences, Inc. et al.
 ; TITLE OF INVENTION: Brain-Associated Inhibitor of Tissue-Type Plasminogen Activator
 ; FILE REFERENCE: PF336P1
 ; CURRENT APPLICATION NUMBER: US/10/355,208
 ; CURRENT FILING DATE: 2003-01-31
 ; PRIOR APPLICATION NUMBER: US/09/521,664
 ; PRIOR FILING DATE: 2000-03-08
 ; PRIOR APPLICATION NUMBER: US 60/123,704
 ; PRIOR FILING DATE: 1999-03-10
 ; NUMBER OF SEQ ID NOS: 21
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 2
 ; LENGTH: 410
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-10-355-208-2

Query Match 39.8%; Score 791.5; DB 15; Length 410;
 Best Local Similarity 39.5%; Pred. No. 5.8e-57;
 Matches 155; Conservative 97; Mismatches 135; Indels 5; Gaps 2;
 QY 6 LWSLLFFGQSARCSAQNTEFAVDLYQEVLSHKD-NIIFSPGLITLVLEMVQLGAK 64
 Db 6 LFSLLVLSQMATGATPPEAIAADLSVMYNNRNRATGDEENILFSPLSIALANGMELGAQ 65
 QY 65 GKAAQOIROTLLKQOETSAGEEFLVLSKSPCSAISSEKKEQFTFNLANALYLQEGFTVKEOYL 124

Db 66 GSTQKEIRHSMGYDSLKNGEBSFLKEFSNMVTAKESQYVMKIANSLFVQNGFHVNEBFL 125
Qy 125 HGNKEFFQSAIKLVDFQDQAKAEMISTWVERKTGKIKDMFSGEEFGPLTRLVLVNAIY 184
Db 126 QMMKKYFNAVNHVDFSQNVAVANKVWENNNTNVLKDLVSPRDFDAATYALINAVY 185
Qy 185 FKGDWKQKFRKEDTQJLNTFKNGSTVKIPMMKALLRTKYGVFSSSLN---YQVLELS 240
Db 186 FGNWKSQRPENTRTFTSKDDESEVQIPMMYQOGEFFYGFSGSNEAGGIYQVLEIP 245
Qy 241 YKGEDEFSLLIILPAEGMDIEEVEKLITAAQOILKWLSEMOEVEEISLPRFKVQKVDPKD 300
Db 246 YEGDEISMLVLRSQEVPLATLEPLVKAQVVEWANSVKQKVEVILPRFTVQEIDLKD 305
Qy 301 VLYSLNITFIPIFGGCDLSGTDSEVYVSQVTKVFFNEEDGSEAAATSTGHIHIVMSL 360
Db 306 VLKALGITFIPIKADNLUTGLSDNKEIFLSKAHKSFLVNEEGSEAAVSGMIAISRMAY 365
Qy 361 AQSOFTIANHPFLFMKHNPTESILFMGRVTNP 392
Db 366 LYPQVVDHPFFFLIRNRRTGTLFMGRVWHP 397

RESULT 8
US-10-752-041-2
; Sequence 2, Application US/10752041
; Publication No. US20040203101A1
; GENERAL INFORMATION:
; APPLICANT: Hastings, et al.
; TITLE OF INVENTION: Brain-Associated Inhibitor of Tissue-Type Plasminogen Activator
; FILE REFERENCE: PF336P3
; CURRENT APPLICATION NUMBER: US/10/752,041
; CURRENT FILING DATE: 2004-01-07
; PRIOR APPLICATION NUMBER: 10/355,208
; PRIOR FILING DATE: 2003-01-31
; PRIOR APPLICATION NUMBER: 09/987,021
; PRIOR FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: 09/957,485
; PRIOR FILING DATE: 2001-09-21
; PRIOR APPLICATION NUMBER: 09/722,292
; PRIOR FILING DATE: 2000-11-28
; PRIOR APPLICATION NUMBER: 60/247,971
; PRIOR FILING DATE: 2000-11-14
; PRIOR APPLICATION NUMBER: 09/521,664
; PRIOR FILING DATE: 2000-03-08
; PRIOR APPLICATION NUMBER: 09/348,817
; PRIOR FILING DATE: 1999-07-08
; PRIOR APPLICATION NUMBER: 60/123,704
; PRIOR FILING DATE: 1999-03-10
; PRIOR APPLICATION NUMBER: 08/948,997
; PRIOR FILING DATE: 1997-10-10
; PRIOR APPLICATION NUMBER: 60/028,117
; PRIOR FILING DATE: 1996-10-11
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: Patent in Ver. 2.1
; SEQ ID NO 2
; LENGTH: 410
; TYPE: PRT
; ORGANISM: Homo sapiens

US-10-752-041-2
Query Match 39.8%; Score 791.5; DB 17; Length 410;
Best Local Similarity 39.5%; Pred. No. 5.8e-57;
Matches 155; Conservative 97; Mismatches 135; Indels 5; Gaps 2;

Qy 6 LWSLLLFQGSQASRCQAQNT--EFAVDLYQEVLSLHKD--NIIFSPGLITLVLEMVOLGAK 64
Db 6 LFSLLVQSMATGATFPEEAIADLSVNMVNRKLRATGDENILFSPISIALAMGMELGAQ 65
Qy 65 GKAAQQIIRQTLKQOETSAGBEFLVLKSFCSAISEKKQBEFTFNLANALYLQEGFTVKEQYL 124
Db 66 GSTQKEIRHSMGYDSLKNGEBSFLKEFSNMVTAKESQYVMKIANSLFVQNGFHVNEBFL 125

Qy 125 HGNKEFFQSAIKLVDFQDQAKAEMISTWVERKTGKIKDMFSGEEFGPLTRLVLVNAIY 184
Db 126 QMMKKYFNAVNHVDFSQNVAVANKVWENNNTNVLKDLVSPRDFDAATYALINAVY 185
Qy 185 FKGDWKQKFRKEDTQJLNTFKNGSTVKIPMMKALLRTKYGVFSSSLN---YQVLELS 240
Db 186 FGNWKSQRPENTRTFTSKDDESEVQIPMMYQOGEFFYGFSGSNEAGGIYQVLEIP 245
Qy 241 YKGEDEFSLLIILPAEGMDIEEVEKLITAAQOILKWLSEMOEVEEISLPRFKVQKVDPKD 300
Db 246 YEGDEISMLVLRSQEVPLATLEPLVKAQVVEWANSVKQKVEVILPRFTVQEIDLKD 305
Qy 301 VLYSLNITFIPIFGGCDLSGTDSEVYVSQVTKVFFNEEDGSEAAATSTGHIHIVMSL 360
Db 306 VLKALGITFIPIKADNLUTGLSDNKEIFLSKAHKSFLVNEEGSEAAVSGMIAISRMAY 365
Qy 361 AQSOFTIANHPFLFMKHNPTESILFMGRVTNP 392
Db 366 LYPQVVDHPFFFLIRNRRTGTLFMGRVWHP 397

RESULT 9
US-09-957-485-3
; Sequence 3, Application US/09957485
; Patent No. US20020143165A1
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc. et al.
; TITLE OF INVENTION: Brain-Associated Inhibitor of Tissue-Type Plasminogen Activator
; FILE REFERENCE: PF336P1
; CURRENT APPLICATION NUMBER: US/09/957,485
; CURRENT FILING DATE: 2001-09-21
; PRIOR APPLICATION NUMBER: US 09/521,664
; PRIOR FILING DATE: 2000-03-08
; PRIOR APPLICATION NUMBER: US 60/123,704
; PRIOR FILING DATE: 1999-03-10
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: Patent in Ver. 2.1
; SEQ ID NO 3
; LENGTH: 410
; TYPE: PRT
; ORGANISM: Gallus gallus
US-09-957-485-3

Query Match 39.7%; Score 788.5; DB 9; Length 410;
Best Local Similarity 40.0%; Pred. No. 1e-56;
Matches 158; Conservative 92; Mismatches 138; Indels 7; Gaps 3;

Qy 5 FLWSLLLFQGSQASRCQAQNT--EFAVDLYQEVLSLHKD--NIIFSPGLITLVLEMVOL 61
Db 3 FLGLLSLLVLPSPKAFKTFPDTIAELSVNVYNQLRAAREDENILFCPLSIAIANGMIEL 62
Qy 62 GAKGAQQOIRQTLKQOETSAGBEFLVLKSFCSAISEKKQBEFTFNLANALYLQEGFTVKE 121
Db 63 GAHGTTLKEIRHSLGFDLSKNGEFTFLKDLSDMATTEESHYLVNMANSLYVQNGFHVSE 122
Qy 122 QYLHGNKEFFQSAIKLVDFQDQAKAEMISTWVERKTGKIKDMFSGEEFGPLTRLVLVN 181
Db 123 KFLQVLVKYFRAEVENIDFSQSAVATHINKVENVHNNMIKDFVSSRDFGALTLHLVLIN 182
Qy 182 AIYFKGDWKQKFRKEDTQJLNTFKNGSTVKIPMMKALLRTKYGVFSSSLN---YQVL 237
Db 183 AIYFGNWKSOFRPENTRTFTSKDDETEVQIPMMYQOGEFFYGFSGSNEAGGIYQVL 242
Qy 238 ELSYKGDFFSLIILPAEGMDIEEVEKLITAAQOILKWLSEMOEVEEISLPRFKVQKVD 297
Db 243 EPIYEGDEISMMVILRSQEVPLATLEPLVKAQVVEWANSVKQKVEVILPRFTVQEID 302
Qy 298 FKDVLYSLNITFIPIFGGCDLSGTDSEVYVSQVTKVFFNEEDGSEAAATSTGHIHIVI 357
Db 303 LKDLVKGJGITEVFSRDLTAMSDNKEILYAKAFHKAFLVNEEGSEAAASGMIAISR 362
Qy 358 MSLAQSOFTIANHPFLFMKHNPTESILFMGRVTNP 392


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; PRIOR APPLICATION NUMBER: 09/521,664
; PRIOR FILING DATE: 2000-03-08
; PRIOR APPLICATION NUMBER: 09/348,817
; PRIOR FILING DATE: 1999-07-08
; PRIOR APPLICATION NUMBER: 60/123,704
; PRIOR FILING DATE: 1999-03-10
; PRIOR APPLICATION NUMBER: 08/948,997
; PRIOR FILING DATE: 1997-10-10
; PRIOR APPLICATION NUMBER: 60/028,117
; PRIOR FILING DATE: 1998-10-11
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: Patent in Ver. 2.1
; SEQ ID NO 3
; LENGTH: 410
; TYPE: PRT
; ORGANISM: Gallus gallus
US-10-752-041-3

Query Match      39.7%; Score 788.5; DB 17; Length 410;
Best Local Similarity 40.0%; Pred. No. 1e-56;
Matches 158; Conservative 92; Mismatches 138; Indels 7; Gaps 3;

QY 5 FLWSLLLPFGSOARCSAQKNT--EPAVDLYQEVSLSHKD-NIIFSPGLGITLVLEMVOL 61
Db 3 FLGLSLLVLPKSAKFTNPDDETIASLSVNVYNQLRAAREDENILFCPLSIATANGMIEL 62
QY 62 GAKGKAQOQIOTLQKQETSAGEBFLVLKSCFSAISEKKQEFNTNLNANALYLQEGFTVKE 121
Db 63 GAGHTLKEIRSLGDFSLKNGEFTFLKDLSDMATTEESHVYVLNMANSLYVQNGPRVSE 122
QY 122 QVILHGNKEFFQSAIKLVLPQAKACAEIMISTWVERKTDGKIKDMFSGEEFGLPLRLVLVN 181
Db 123 KFLQLVKYFKAEVNDIFDSQAAVATHINKVVENHTNMIKDFVSSRDFPSALTHVLVN 182
QY 182 ATYFKGDWQKFRKEDTQNLNFTKNGSTVKIPMKALLRTKYGYFSESLN----YQVL 237
Db 183 ATYFKGNWKSQRPENTTFSTKDDTEVOIPMYOGEFYGEFSDGNEAGGIYQVL 242
QY 238 ELSYKGDPESLIILPAEGMDIEVEKLIITAQOILKWLSEMQEVEVEISLPRFKVQKVD 297
Db 243 EIPYGEDEISMMVLSRQEVPLVLEPLVKASLINEWANSYKQKVEVYLPRTVQGEID 302
QY 298 FQDVLVSLNITLIFSGGDLGSLTSSVYVQVTKVFFNEIDGSEATSTGHIHPVI 357
Db 303 LKDVLRKGLGITVFRSADLTAMSONKSLYAKAFKAFLEVNEEGSEAAAAAGMTAISR 362
QY 358 MSIAOSQFIANHPFLFMKHNPTESILFPMGRVTNP 392
Db 363 MAVLYPQVIVDHPFFFLVNRRTGTGVLPMGRVWHP 397

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RESULT 13

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US-10-023-634-88
; Sequence 88, Application US/10023634
; Publication No. US20030236389A1
; GENERAL INFORMATION:
; APPLICANT: Shimkets, Richard A
; APPLICANT: Colman, Steven D
; APPLICANT: Szytek, Kimberly A
; APPLICANT: Ballinger, Robert A
; APPLICANT: Guo, Xiaojia
; APPLICANT: Tchernev, Velizar T
; APPLICANT: Shenoy, Suresh G
; APPLICANT: Li, Li
; APPLICANT: Ellerman, Karen
; APPLICANT: Zertusen, Bryan D
; APPLICANT: Patturajan, Meera
; APPLICANT: Casman, Stacie J
; APPLICANT: Boldog, Ferenc
; APPLICANT: Gusev, Vladimir Y
; APPLICANT: Burgess, Catherine E
; APPLICANT: Edinger, Shlomit R
; APPLICANT: Gangolli, Esha A

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; APPLICANT: Malyankar, Uriel M
; APPLICANT: Gunther, Erik
; APPLICANT: Smithson, Glennda
; APPLICANT: Millet, Isabelle
; APPLICANT: Gerlach, Valerie
; TITLE OF INVENTION: Proteins, polynucleotides Encoding Them and Methods of
; TITLE OF INVENTION: Using the Same
; FILE REFERENCE: 21402-221
; CURRENT APPLICATION NUMBER: US/10/023,634
; CURRENT FILING DATE: 2002-06-28
; PRIOR APPLICATION NUMBER: 60/256,025
; PRIOR FILING DATE: 2000-12-15
; PRIOR APPLICATION NUMBER: 60/265,163
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: 60/272,929
; PRIOR FILING DATE: 2001-03-02
; PRIOR APPLICATION NUMBER: 60/274,864
; PRIOR FILING DATE: 2001-03-09
; PRIOR APPLICATION NUMBER: 60/276,688
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: 60/277,880
; PRIOR FILING DATE: 2001-03-22
; PRIOR APPLICATION NUMBER: 60/286,409
; PRIOR FILING DATE: 2001-04-25
; PRIOR APPLICATION NUMBER: 60/309,246
; PRIOR FILING DATE: 2001-07-31
; PRIOR APPLICATION NUMBER: 60/315,600
; PRIOR FILING DATE: 2001-08-29
; NUMBER OF SEQ ID NOS: 132
; SOFTWARE: Patent in Ver. 2.1
; SEQ ID NO 88
; LENGTH: 360
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-023-634-88

Query Match      35.5%; Score 706; DB 14; Length 360;
Best Local Similarity 43.3%; Pred. No. 5.8e-50;
Matches 158; Conservative 66; Mismatches 131; Indels 10; Gaps 8;

QY 32 DLVQEVSLSHKD-NIIFSPGLGITLVLEMVOLGAKGKAAQOQIQTLL--KQOETSAGEEFLV 88
Db 2 DLYKELAKESPDKNIFSPVSISSALAMLSLGAAGSTATQILEVLGNFUTETSEADIHQG 61
QY 89 LKSFCSAISEKKQEFNTNLNANALYLQEGFTVKEQVYLHGNKEFFQSAIKLVDPQD-AKACA 147
Db 62 FOHLHLNLRPNKLOLKTANALFVDKSLKLLDLSFLEDVKLYGAEVQSDPFAEBAK 121
QY 148 EMISTWVERKTDGKIKDMFSGEEFGLPLRLVLVNATYFKGDWQKFRKEDTQNLNFTKKN 207
Db 122 KQINDWVKKTQGIKDLIS--DLDPDRLVLVNATYFKGKWKTFDPDENTREEDFYUDE 179
QY 208 GSTVKIPMKALLRTKYGYFSESLNLYQVLEISYKGDPESLIILPAEGMDIEVEKLIIT 267
Db 180 TTTVKVPMNSQTGRT-FRYGRDEELNCQVLELPYKQNA-SMLIILPDEG-GLETVEKALT 236
QY 268 AQOILKWLSEMQEVEVEISLPRFKVQKVDKDLVLYSLNITLIFSGGDLGSLTSSVY 327
Db 237 PETLKKWTKSLTKRSVELYLPKFKLEISYDLKDLKLEKITDLFKNKADLSISDKDLK 296
QY 328 VSQVTKVFFNEIDGSEATSTGHIHPVIMSLAOSQFIANHPFLFMKHNPTESILFPMG 387
Db 297 VSKVHVKAFLEVNEEGTEAAATGV-IIVPRSLPPEPFKANKRPFLLIRDNPTGSLFPMG 355
QY 388 RVTNP 392
Db 356 KVNPN 360

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RESULT 14

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US-10-037-417-67
; Sequence 67, Application US/10037417
; Publication No. US20040052806A1

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Db 9 ASANADFAFSLYKELVEQNPKDNIFPSPVSISSALAMLSLGAKGNATQILEVLGFNLTE 68
QY 80 TSAGEEFLVLKFCSAISEKKOEFTFNLANALYLOEGFTVKEOYLHGNKEFFQSAIKLYD 139
Db 69 TSEAEHQGFQHLQTLNRPDTGLOLTTGNALFVDKSLKLDDEFLEDSKRLYQSEVFSVD 128
QY 140 FODAKACAEIMISTWVERKTDGKIKDMFSGEEFGPLTRLVLVNAIYFKGDWKQKPKEDTQ 199
Db 129 FSDPEAKQINDWEKKTQGIKDLL--KDLDSDTLVLVNYIYFKGKWKKPPDPDELTE 186
QY 200 LINFTRKNGSTVKIPMMKALLRTKYGFSESSINYOVLSELSYKGDDEFSLIILPAEGMDI 259
Db 187 EEDFHVDKKTTVKVPMMNQL--GTFYFRDEELNCKVLELPYKGNATSMFLPDEVGKL 244
QY 260 EEVEKLITAQOILKWLSEMOEVEIISLPREKVEQKVPKDVLYSLNITEIFSGGCDLSG 319
Db 245 EQVEAALSPELTKRWLENMEPREVELYLPKFSIEGTYDLKDVLAKLGITDLFSNQADLSG 304
QY 320 ITDSSEVYVSQVTKQVFFFEINEDGSEAAATSTGI-----HIPVMSLAOSQFIANHPFLFI 374
Db 305 ISEDEDLKYSKAVHKAVLEVDEBEGTEAAAAATGAIIVPRSLPPII-----EFTADRPFLFL 359
QY 375 MKHNPTESILFMGRVTNP 392
Db 360 IYDNPTGSILFMGKVYNP 377

Search completed: October 21, 2004, 06:57:23
Job time : 132 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 21, 2004, 06:38:56 ; Search time 40 Seconds
(without alignments)
649.916 Million cell updates/sec

Title: US-10-628-395-2
Perfect score: 1987
Sequence: 1 MDRIFLWSLLLPFGQASR.....FMKHNPTESILFMGRVTNP 392

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA:*
1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep.*
2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep.*
3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep.*
4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep.*
5: /cgn2_6/ptodata/1/iaa/PTUS_COMB.pep.*
6: /cgn2_6/ptodata/1/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1987	100.0	392	3	US-09-026-408-2
2	1987	100.0	392	4	US-09-902-684-2
3	1987	100.0	405	3	US-09-026-408-13
4	1987	100.0	405	4	US-09-902-684-13
5	1777.5	89.5	406	1	US-08-434-881-2
6	1777.5	89.5	406	3	US-08-977-771-2
7	1777.5	89.5	406	3	US-09-367-773-2
8	791.5	39.8	410	3	US-08-948-997-2
9	791.5	39.8	410	4	US-09-348-817A-2
10	791.5	39.8	410	4	US-09-722-292-2
11	788.5	39.7	410	3	US-09-348-817A-3
12	788.5	39.7	410	4	US-09-722-292-3
13	756	38.0	407	3	US-08-948-997-3
14	751	37.8	407	1	US-08-487-823B-2
15	751	37.8	407	2	US-08-997-040-2
16	751	37.8	407	2	US-09-203-237-2
17	651.5	32.8	420	1	US-08-487-823B-4
18	651.5	32.8	420	2	US-08-997-040-4
19	651.5	32.8	420	2	US-09-203-237-4
20	649	32.7	390	1	US-08-568-147B-2
21	643	32.4	390	3	US-09-266-910-3
22	642.5	32.3	406	1	US-08-487-823B-5
23	642.5	32.3	406	2	US-08-997-040-5
24	642.5	32.3	406	2	US-09-203-237-5
25	641	32.3	390	3	US-09-266-910-4
26	595	29.9	376	3	US-09-200-965-2
27	591.5	29.8	425	4	US-10-024-427-2

28	573.5	28.9	379	1	US-08-121-714-4	Sequence 4, Appli
29	573.5	28.9	379	1	US-08-477-108A-4	Sequence 4, Appli
30	573.5	28.9	379	2	US-08-477-112-4	Sequence 4, Appli
31	573.5	28.9	379	5	PCT-US93-08322-4	Sequence 4, Appli
32	569.5	28.7	375	1	US-08-121-714-8	Sequence 8, Appli
33	569.5	28.7	375	1	US-08-477-108A-8	Sequence 8, Appli
34	569.5	28.7	375	2	US-08-477-112-8	Sequence 8, Appli
35	569.5	28.7	375	5	PCT-US93-08322-8	Sequence 8, Appli
36	562.5	28.3	397	3	US-08-948-997-5	Sequence 5, Appli
37	562.5	28.3	397	3	US-09-348-817A-5	Sequence 5, Appli
38	562.5	28.3	397	4	US-09-722-292-5	Sequence 5, Appli
39	562.5	28.3	397	6	5457090-2	Patent No. 5457090
40	562.5	28.3	397	6	5457090-4	Patent No. 5457090
41	561.5	28.3	397	6	5457090-9	Patent No. 5457090
42	558.5	28.1	402	3	5187089-9	Patent No. 5187089
43	558	28.1	402	3	US-08-948-997-4	Sequence 4, Appli
44	558	28.1	402	3	US-09-348-817A-4	Sequence 4, Appli
45	558	28.1	402	4	US-09-722-292-4	Sequence 4, Appli

ALIGNMENTS

RESULT 1
US-09-026-408-2
; Sequence 2, Application US/09026408
; Patent No. 6303338
; GENERAL INFORMATION:
; APPLICANT: NI et al.
; TITLE OF INVENTION: PANCREAS-DERIVED PLASMINOGEN ACTIVATOR
; TITLE OF INVENTION: INHIBITOR
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
; STREET: 1100 NEW YORK AVENUE, SUITE 600
; CITY: WASHINGTON
; STATE: DC
; COUNTRY: USA
; ZIP: 20005-3934
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/026,408
; FILING DATE: Herewith
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/934,011
; FILING DATE: 15-AUG-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/024,056
; FILING DATE: 16-AUG-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: STEFFE, ERIC K.
; REGISTRATION NUMBER: 36,688
; REFERENCE/DOCKET NUMBER: 1488.0300002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-371-2600
; TELEFAX: 202-371-2540
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 392 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-09-026-408-2

Query Match 100.0%; Score 1987; DB 3; Length 392;
Best Local Similarity 100.0%; Pred. No. 1.1e-187;
Matches 392; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDTIFLWSLLLLFFGQSASRCSAQNTEFAVDLYQEVSLSHKDNIIFSPGLITLVLEMQ 60
 Db 1 MDTIFLWSLLLLFFGQSASRCSAQNTEFAVDLYQEVSLSHKDNIIFSPGLITLVLEMQ 60
 QY 61 LGAKGKAAQQIROTILKQOETAGBEFLVLSFCSAISSEKQOFTFNLANALYQEGFTVK 120
 Db 61 LGAKGKAAQQIROTILKQOETAGBEFLVLSFCSAISSEKQOFTFNLANALYQEGFTVK 120
 QY 121 EOYLHGNKEFFQSAIKLVDFODAKACAEIMSTWVERKTDGKIDMFSGEEFGPLTRVLV 180
 Db 121 EOYLHGNKEFFQSAIKLVDFODAKACAEIMSTWVERKTDGKIDMFSGEEFGPLTRVLV 180
 QY 181 NAIYFKGDKWKQKFRKEDTQILNFTKNGSTVKIPMKALLRTKYGYFSESLSNYQVLELS 240
 Db 181 NAIYFKGDKWKQKFRKEDTQILNFTKNGSTVKIPMKALLRTKYGYFSESLSNYQVLELS 240
 QY 241 YKGDEFSLIIILPAEGMDIEVEKLIITAQQLKWLSEMQEVEEISLPRFKVEQKVDKFD 300
 Db 241 YKGDEFSLIIILPAEGMDIEVEKLIITAQQLKWLSEMQEVEEISLPRFKVEQKVDKFD 300
 QY 301 VLYSLNTEIFSGGCDLSGITDSSEVYVSQVTKVFFFEINEDGSEATSTGIHIPVIMSL 360
 Db 301 VLYSLNTEIFSGGCDLSGITDSSEVYVSQVTKVFFFEINEDGSEATSTGIHIPVIMSL 360
 QY 361 AQSQFIANHPFLFMKNPTESILFMGRVTNP 392
 Db 361 AQSQFIANHPFLFMKNPTESILFMGRVTNP 392

RESULT 2

US-09-902-684-2
 ; Sequence 2, Application US/09902684
 ; Patent No. 6649738
 ; GENERAL INFORMATION:
 ; APPLICANT: NI et al.
 ; TITLE OF INVENTION: PANCREAS-DERIVED PLASMINOGEN ACTIVATOR INHIBITOR
 ; NUMBER OF SEQUENCES: 15
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
 ; STREET: 1100 NEW YORK AVENUE, SUITE 600
 ; CITY: WASHINGTON
 ; STATE: DC
 ; COUNTRY: USA
 ; ZIP: 20005-3934
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent in Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/902,684
 ; FILING DATE: 12-Jul-2001
 ; CLASSIFICATION: <Unknown>
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 09/026,408
 ; FILING DATE: <Unknown>
 ; APPLICATION NUMBER: US 60/024,056
 ; FILING DATE: 16-AUG-1996
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: STEFFE, ERIC K.
 ; REGISTRATION NUMBER: 36,688
 ; REFERENCE/DOCKET NUMBER: 1488.0300002
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 202-371-2600
 ; TELEFAX: 202-371-2540
 ; INFORMATION FOR SEQ ID NO: 2:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 392 amino acids
 ; TYPE: amino acid
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: protein
 ; SEQUENCE DESCRIPTION: SEQ ID NO: 2:

US-09-902-684-2

Query Match 100.0%; Score 1987; DB 4; Length 392;
 Best Local Similarity 100.0%; Pred. No. 1.1e-187;
 Matches 392; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MDTIFLWSLLLLFFGQSASRCSAQNTEFAVDLYQEVSLSHKDNIIFSPGLITLVLEMQ 60
 Db 1 MDTIFLWSLLLLFFGQSASRCSAQNTEFAVDLYQEVSLSHKDNIIFSPGLITLVLEMQ 60
 QY 61 LGAKGKAAQQIROTILKQOETAGBEFLVLSFCSAISSEKQOFTFNLANALYQEGFTVK 120
 Db 61 LGAKGKAAQQIROTILKQOETAGBEFLVLSFCSAISSEKQOFTFNLANALYQEGFTVK 120
 QY 121 EOYLHGNKEFFQSAIKLVDFODAKACAEIMSTWVERKTDGKIDMFSGEEFGPLTRVLV 180
 Db 121 EOYLHGNKEFFQSAIKLVDFODAKACAEIMSTWVERKTDGKIDMFSGEEFGPLTRVLV 180
 QY 181 NAIYFKGDKWKQKFRKEDTQILNFTKNGSTVKIPMKALLRTKYGYFSESLSNYQVLELS 240
 Db 181 NAIYFKGDKWKQKFRKEDTQILNFTKNGSTVKIPMKALLRTKYGYFSESLSNYQVLELS 240
 QY 241 YKGDEFSLIIILPAEGMDIEVEKLIITAQQLKWLSEMQEVEEISLPRFKVEQKVDKFD 300
 Db 241 YKGDEFSLIIILPAEGMDIEVEKLIITAQQLKWLSEMQEVEEISLPRFKVEQKVDKFD 300
 QY 301 VLYSLNTEIFSGGCDLSGITDSSEVYVSQVTKVFFFEINEDGSEATSTGIHIPVIMSL 360
 Db 301 VLYSLNTEIFSGGCDLSGITDSSEVYVSQVTKVFFFEINEDGSEATSTGIHIPVIMSL 360
 QY 361 AQSQFIANHPFLFMKNPTESILFMGRVTNP 392
 Db 361 AQSQFIANHPFLFMKNPTESILFMGRVTNP 392

RESULT 3

US-09-902-608-13
 ; Sequence 13, Application US/09026408
 ; Patent No. 6303338
 ; GENERAL INFORMATION:
 ; APPLICANT: NI et al.
 ; TITLE OF INVENTION: PANCREAS-DERIVED PLASMINOGEN ACTIVATOR INHIBITOR
 ; NUMBER OF SEQUENCES: 15
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
 ; STREET: 1100 NEW YORK AVENUE, SUITE 600
 ; CITY: WASHINGTON
 ; STATE: DC
 ; COUNTRY: USA
 ; ZIP: 20005-3934
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent in Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/026,408
 ; FILING DATE: Herewith
 ; CLASSIFICATION:
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 09/934,011
 ; FILING DATE: 15-AUG-1997
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 60/024,056
 ; FILING DATE: 16-AUG-1996
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: STEFFE, ERIC K.
 ; REGISTRATION NUMBER: 36,688
 ; REFERENCE/DOCKET NUMBER: 1488.0300002
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 202-371-2600
 ; TELEFAX: 202-371-2540

INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 405 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-026-408-13

Query Match 100.0%; Score 1987; DB 3; Length 405;
Best Local Similarity 100.0%; Pred. No. 1.2e-187; Indels 0; Gaps 0;
Matches 392; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDTIFLWSLLLLFFGSOARCSAQKNTFAVDLYQEVSLSHKDNIIFFSLGTLVLEWVQ 60
DB 1 MDTIFLWSLLLLFFGSOARCSAQKNTFAVDLYQEVSLSHKDNIIFFSLGTLVLEWVQ 60
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DB 361 AQSQFIANHPFLFMKHNPTESILFMGRVTNP 392

RESULT 4
US-09-902-684-13
Sequence 13, Application US/09902684
Patent No. 6649738
GENERAL INFORMATION:
APPLICANT: Ni et al.
TITLE OF INVENTION: PANCREAS-DERIVED PLASMINOGEN ACTIVATOR INHIBITOR
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 1100 NEW YORK AVENUE, SUITE 600
CITY: WASHINGTON
STATE: DC
COUNTRY: USA
ZIP: 20005-3934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/902,684
FILING DATE: 12-Jul-2001
CLASSIFICATION: <Unknown>
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: 09/026,408
FILING DATE: <Unknown>
APPLICATION NUMBER: US 60/024,056
FILING DATE: 16-AUG-1996
ATTORNEY/AGENT INFORMATION:
NAME: STEPPE, ERIC K.

INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 405 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-902-684-13

Query Match 100.0%; Score 1987; DB 4; Length 405;
Best Local Similarity 100.0%; Pred. No. 1.2e-187; Indels 0; Gaps 0;
Matches 392; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDTIFLWSLLLLFFGSOARCSAQKNTFAVDLYQEVSLSHKDNIIFFSLGTLVLEWVQ 60
DB 1 MDTIFLWSLLLLFFGSOARCSAQKNTFAVDLYQEVSLSHKDNIIFFSLGTLVLEWVQ 60
QY 61 LGAKGAAQOQIROTLLKQETSAGEEFLVLSKFCSAISEKKQEFTFNLANALYQEGFTVK 120
DB 61 LGAKGAAQOQIROTLLKQETSAGEEFLVLSKFCSAISEKKQEFTFNLANALYQEGFTVK 120
QY 121 EQYLHGNKEFFQSAIKLVDFQDAKACAEIMSTWVERKTDGKIKDMFSGEFGPLRLVLV 180
DB 121 EQYLHGNKEFFQSAIKLVDFQDAKACAEIMSTWVERKTDGKIKDMFSGEFGPLRLVLV 180
QY 181 NAIYFKGDMKQKPKEDTQLINFTKNGSTVKIPMKALLRTKYGFSESSLNQVLELS 240
DB 181 NAIYFKGDMKQKPKEDTQLINFTKNGSTVKIPMKALLRTKYGFSESSLNQVLELS 240
QY 241 YKGDSEFLIILPAEGMDIEVEKLITAAQILKWLSEMOEVEISLPRFKEQKVDPKD 300
DB 241 YKGDSEFLIILPAEGMDIEVEKLITAAQILKWLSEMOEVEISLPRFKEQKVDPKD 300
QY 301 VLYSLNITEIFSGCDLSGITDSSEVYVSQVTKVFFNEEDGSEATSTGHIPIVMSL 360
DB 301 VLYSLNITEIFSGCDLSGITDSSEVYVSQVTKVFFNEEDGSEATSTGHIPIVMSL 360
QY 361 AQSQFIANHPFLFMKHNPTESILFMGRVTNP 392
DB 361 AQSQFIANHPFLFMKHNPTESILFMGRVTNP 392

RESULT 5
US-08-434-881-2
Sequence 2, Application US/08434881
Patent No. 5804376
GENERAL INFORMATION:
APPLICANT: Braxton, Scott M.
ADDRESSEE: Wilde, Craig G.
STREET: 1100 NEW YORK AVENUE, SUITE 600
CITY: WASHINGTON
STATE: DC
COUNTRY: USA
ZIP: 20005-3934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/434,881
FILING DATE: 16-AUG-1996
ATTORNEY/AGENT INFORMATION:
NAME: STEPPE, ERIC K.

```
; ATTORNEY/AGENT INFORMATION:
; NAME: Luther, Barbara J.
; REGISTRATION NUMBER: 33954
; REFERENCE/DOCKET NUMBER: PF0035 US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-855-0555
; TELEFAX: 415-852-0195
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 406 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-434-881-2

Query Match      89.5%; Score 1777.5; DB 1; Length 406;
Best Local Similarity 90.4%; Pred. No. 5.9e-167;
Matches 358; Conservative 7; Mismatches 24; Indels 7; Gaps 2;

QY 1 MDTIFLMSLLLPFGSQASRCSAQKNTFAVDLYQEVSLSHKDNIIIFSPGLITLVLEMVQ 60
DB 1 MDTIFXWSLLLPFGSQASRCSAQKNTFQVDLYQEVSLSHKDNIIIFXPLGIXLXEMXQ 60
QY 61 LGAKGKAQQQIRQTLKQOETSAGEEFLVLKSFCSAISEKQOETFNLANALYL----QEG 116
DB 61 LGAKGKAQQQXXRQTLQOQXSAGEEFLCXEVIFSLPSQRKXK---NLHLILPMPSTXQEG 117
QY 117 FTVKEQYVHGKKEFFQSAIKLVDFQDAKACAEIMSTWVERKTDGKIKDMFSGEEFGPLTR 176
DB 118 FTVKEQYVHGKKEFFQSAIKLVDFQDAKACAGIMSTWVERKTDGKIKDMFSGEEFGPLTR 177
QY 177 LVLNVAIFYGDKWKQKPRKEDTQLINFTKNGSTVKIPMMKALLRTKYGYFSESSLNQV 236
DB 178 LVLNVAIFYGDKWKQKPRKEDTQLINFTKNGSTVKIPMMKALLRTKYGYFSESSLNQV 237
QY 237 LELSYKGDSESLIILPAEGMDIEVEKLIQAQILKWLSEMOEVEEISLPRFKVEQKV 296
DB 238 LELSYKGDSESLIILPAEGMDIEVEKLIQAQILKWLSEMOEVEEISLPRFKVEQKV 297
QY 297 DFKDVLVSLNITEIFSGGCDLSGITDSSEVYVSQVTKVFFNEINEDGSEAAATSTGIHIPV 356
DB 298 DFKDVLVSLNITEIFSGGCDLSGITDSSEVYVSQVTKVFFNEINEDGSEAAATSTGIHIPV 357
QY 357 IMSLAQSQFIANHPFLFMKHNPTESILFMGRVTNP 392
DB 358 IMSLAQSQFIANHPFLFMKHNPTESILFMGRVTNP 393

RESULT 6
US-08-977-771-2
; Sequence 2, Application US/0897771
; Patent No. 601348
; GENERAL INFORMATION:
; APPLICANT: Braxton, Scott M.
; APPLICANT: Wilde, Craig G.
; APPLICANT: Diep, Dinh
; TITLE OF INVENTION: Pancreas-Derived Serpin
; NUMBER OF SEQUENCES: 2
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Incyte Pharmaceuticals, Inc.
; STREET: 3330 Hillview Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: USA
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/977,771
; FILING DATE:
```

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; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/ 434,881
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Luther, Barbara J.
; REGISTRATION NUMBER: 33954
; REFERENCE/DOCKET NUMBER: PF0035 US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-855-0555
; TELEFAX: 415-852-0195
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 406 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-977-771-2

Query Match      89.5%; Score 1777.5; DB 3; Length 406;
Best Local Similarity 90.4%; Pred. No. 5.9e-167;
Matches 358; Conservative 7; Mismatches 24; Indels 7; Gaps 2;

QY 1 MDTIFLMSLLLPFGSQASRCSAQKNTFAVDLYQEVSLSHKDNIIIFSPGLITLVLEMVQ 60
DB 1 MDTIFXWSLLLPFGSQASRCSAQKNTFQVDLYQEVSLSHKDNIIIFXPLGIXLXEMXQ 60
QY 61 LGAKGKAQQQIRQTLKQOETSAGEEFLVLKSFCSAISEKQOETFNLANALYL----QEG 116
DB 61 LGAKGKAQQQXXRQTLQOQXSAGEEFLCXEVIFSLPSQRKXK---NLHLILPMPSTXQEG 117
QY 117 FTVKEQYVHGKKEFFQSAIKLVDFQDAKACAEIMSTWVERKTDGKIKDMFSGEEFGPLTR 176
DB 118 FTVKEQYVHGKKEFFQSAIKLVDFQDAKACAGIMSTWVERKTDGKIKDMFSGEEFGPLTR 177
QY 177 LVLNVAIFYGDKWKQKPRKEDTQLINFTKNGSTVKIPMMKALLRTKYGYFSESSLNQV 236
DB 178 LVLNVAIFYGDKWKQKPRKEDTQLINFTKNGSTVKIPMMKALLRTKYGYFSESSLNQV 237
QY 237 LELSYKGDSESLIILPAEGMDIEVEKLIQAQILKWLSEMOEVEEISLPRFKVEQKV 296
DB 238 LELSYKGDSESLIILPAEGMDIEVEKLIQAQILKWLSEMOEVEEISLPRFKVEQKV 297
QY 297 DFKDVLVSLNITEIFSGGCDLSGITDSSEVYVSQVTKVFFNEINEDGSEAAATSTGIHIPV 356
DB 298 DFKDVLVSLNITEIFSGGCDLSGITDSSEVYVSQVTKVFFNEINEDGSEAAATSTGIHIPV 357
QY 357 IMSLAQSQFIANHPFLFMKHNPTESILFMGRVTNP 392
DB 358 IMSLAQSQFIANHPFLFMKHNPTESILFMGRVTNP 393

RESULT 7
US-09-361-773-2
; Sequence 2, Application US/09361773
; Patent No. 6197519
; GENERAL INFORMATION:
; APPLICANT: Braxton, Scott M.
; APPLICANT: Wilde, Craig G.
; APPLICANT: Diep, Dinh
; TITLE OF INVENTION: Pancreas-Derived Serpin
; NUMBER OF SEQUENCES: 2
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Incyte Pharmaceuticals, Inc.
; STREET: 3330 Hillview Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: USA
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: PC-DOS/MS-DOS
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PC-DOS/MS-DOS
; FILING DATE:
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SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/361,773
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/977,771
FILING DATE:
APPLICATION NUMBER: 08/434,881
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Luther, Barbara J.
REGISTRATION NUMBER: 33954
REFERENCE/DOCKET NUMBER: PF0035 US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-855-0555
TELEFAX: 415-852-0195
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 406 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-361-773-2

Query Match 89.5%; Score 1777.5; DB 3; Length 406;

Best Local Similarity 90.4%; Pred. No. 5.9e-167;
Matches 358; Conservative 7; Mismatches 24; Indels 7; Gaps 2;

QY 1 MDIFLWSLLLLPFGSCASCSAQKNTFAVDLYQEVSLSHKDNIIFFPLGTLVLEMQ 60
DB 1 MDIFLWSLLLLPFGSCASCSAQKNTFAVDLYQEVSLSHKDNIIFFPLGTLVLEMQ 60
QY 61 LGAKGAQAOIRQLKQETSAGEEFLVLKSFCSAISEKKQEFFTNLANALYL---QBG 116
DB 61 LGAKGAQAOIRQLKQETSAGEEFLVLKSFCSAISEKKQEFFTNLANALYL---QBG 116
QY 117 FTVKEQYLHGNKEFFSOAIIKLVDFQDAKCAEMISTWVERKTDGKIKDMFSGEERGLTR 176
DB 117 FTVKEQYLHGNKEFFSOAIIKLVDFQDAKCAEMISTWVERKTDGKIKDMFSGEERGLTR 176
QY 177 LVLVNAIFYKGMKQFRKEDTQINFTKNGSTVKIPMMKALLRTKYGYSSESLNYQV 236
DB 177 LVLVNAIFYKGMKQFRKEDTQINFTKNGSTVKIPMMKALLRTKYGYSSESLNYQV 236
QY 237 LELSYKGDSEFLIILPAEGMDIEVEKLIITAOQILKWLSEMOEVEISLPRFKVEQV 296
DB 237 LELSYKGDSEFLIILPAEGMDIEVEKLIITAOQILKWLSEMOEVEISLPRFKVEQV 296
QY 297 DFKDVLVSLNITIFSGGCDLSGITDSSEVYVSQVTKVFFFEINEDGSEAAATSTGIHIPV 356
DB 297 DFKDVLVSLNITIFSGGCDLSGITDSSEVYVSQVTKVFFFEINEDGSEAAATSTGIHIPV 356
QY 357 IMSLAQSQFIANHPFLFMKHNPTESILFMGRVTNP 392
DB 357 IMSLAQSQFIANHPFLFMKHNPTESILFMGRVTNP 392

RESULT 8
US-09-361-773-2
Sequence 2, Application US/089495997
Patent No. 6008020
GENERAL INFORMATION:
APPLICANT: HASTINGS, GREGG
APPLICANT: COLEMAN, TIM
APPLICANT: LAWRENCE, DANIEL
TITLE OF INVENTION: BRAIN-ASSOCIATED INHIBITOR OF
NUMBER OF SEQUENCES: 17
CORRESPONDENCE ADDRESS:
ADDRESSEE: HUMAN GENOME SCIENCES, INC.
STREET: 9410 KEY WEST AVENUE
CITY: ROCKVILLE

STATE: MD
COUNTRY: USA
ZIP: 20850
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/948,997
FILING DATE: Oct-10-97
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: A. ANDERS BROOKES
REGISTRATION NUMBER: 36,373
REFERENCE/DOCKET NUMBER: PF336
TELECOMMUNICATION INFORMATION:
TELEPHONE: (301) 309-8504
TELEFAX: (301) 309-8512
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 410 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-948-997-2

Query Match 39.8%; Score 791.5; DB 3; Length 410;

Best Local Similarity 39.5%; Pred. No. 1.4e-69;
Matches 155; Conservative 97; Mismatches 135; Indels 5; Gaps 2;

QY 6 LWSLLLLPFGSCASCSAQKNTFAVDLYQEVSLSHKDNIIFFPLGTLVLEMQCAK 64
DB 6 LWSLLLLPFGSCASCSAQKNTFAVDLYQEVSLSHKDNIIFFPLGTLVLEMQCAK 64
QY 65 GKAAQAOIRQLKQETSAGEEFLVLKSFCSAISEKKQEFFTNLANALYLQEGFTVKBQYL 124
DB 65 GKAAQAOIRQLKQETSAGEEFLVLKSFCSAISEKKQEFFTNLANALYLQEGFTVKBQYL 124
QY 66 GSTQKTHSHSGYDLSLKNGBEFLKPSNMVTAKESQYVNMKIANSLFVQNGFHVNEEF 125
DB 66 GSTQKTHSHSGYDLSLKNGBEFLKPSNMVTAKESQYVNMKIANSLFVQNGFHVNEEF 125
QY 125 HGNKEFFSOAIIKLVDFQDAKCAEMISTWVERKTDGKIKDMFSGEERGLTRVNAV 184
DB 125 HGNKEFFSOAIIKLVDFQDAKCAEMISTWVERKTDGKIKDMFSGEERGLTRVNAV 184
QY 126 QMKKYYFNAAYNHVDVFSQNVAVANYINKWENNINLVKDLVSPRDFDAATYLLINAVY 185
DB 126 QMKKYYFNAAYNHVDVFSQNVAVANYINKWENNINLVKDLVSPRDFDAATYLLINAVY 185
QY 185 PKGDKWQKFRKEDTQINFTKNGSTVKIPMMKALLRTKYGYSSESLN---YQVLELS 240
DB 185 PKGDKWQKFRKEDTQINFTKNGSTVKIPMMKALLRTKYGYSSESLN---YQVLELS 240
QY 186 PKGNWKSQFRNRTFTSKDSEVCIIPMWYQGRFYGFSDGSNEAGGIQVLEIP 245
DB 186 PKGNWKSQFRNRTFTSKDSEVCIIPMWYQGRFYGFSDGSNEAGGIQVLEIP 245
QY 241 YKGEFSLIILPAEGMDIEVEKLIITAOQILKWLSEMOEVEISLPRFKVEQV 300
DB 241 YKGEFSLIILPAEGMDIEVEKLIITAOQILKWLSEMOEVEISLPRFKVEQV 300
QY 246 YEGDEISMLVLSRQEVPLATLEPLVKAQLVEEWANSYKQKQVYLPFRFTVEQEI 305
DB 246 YEGDEISMLVLSRQEVPLATLEPLVKAQLVEEWANSYKQKQVYLPFRFTVEQEI 305
QY 301 VLYSLNITIFSGGCDLSGITDSSEVYVSQVTKVFFFEINEDGSEAAATSTGIHIPVMSL 360
DB 301 VLYSLNITIFSGGCDLSGITDSSEVYVSQVTKVFFFEINEDGSEAAATSTGIHIPVMSL 360
QY 306 VLKALGITEIFIKANLTGLSDNKEIFLSKAIHKSFLVNEEGSEAAVSGMIAISRNAV 365
DB 306 VLKALGITEIFIKANLTGLSDNKEIFLSKAIHKSFLVNEEGSEAAVSGMIAISRNAV 365
QY 361 AQSQFIANHPFLFMKHNPTESILFMGRVTNP 392
DB 361 AQSQFIANHPFLFMKHNPTESILFMGRVTNP 392
QY 366 LYPQIVVDHPFFFLRNRTGTILFMGRVMP 397
DB 366 LYPQIVVDHPFFFLRNRTGTILFMGRVMP 397

RESULT 9
US-09-348-817A-2
Sequence 2, Application US/09348817A
Patent No. 6191260
GENERAL INFORMATION:
APPLICANT: Hastings et al.
APPLICANT: COLEMAN, TIM
TITLE OF INVENTION: Brain-Associated Inhibitor of Tissue-Type Plasminogen
NUMBER OF SEQUENCES: 17
CORRESPONDENCE ADDRESS:
ADDRESSEE: HUMAN GENOME SCIENCES, INC.
STREET: 9410 KEY WEST AVENUE
CITY: ROCKVILLE

; PRIOR APPLICATION NUMBER: 60/028,117
 ; PRIOR FILING DATE: 1996-10-11
 ; NUMBER OF SEQ ID NOS: 17
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 2
 ; LENGTH: 410
 ; TYPE: PRP
 ; ORGANISM: Homo sapiens
 ; FEATURE:
 ; NAME/KEY: Propep
 ; LOCATION: (1)..(410)
 ; NAME/KEY: signal
 ; LOCATION: (1)..(18)
 ; NAME/KEY: chain
 ; LOCATION: (19)..(410)
 ; LOCATION: (19)..(410)
 US-09-348-817A-2

 Query Match 39.8%; Score 791.5; DB 3; Length 410;
 Best Local Similarity 39.5%; Pred. No. 1.4e-69;
 Matches 155; Conservative 97; Mismatches 135; Indels 5; Gaps 2;

 QY 6 LWSLLLLFFGQSASRCSAQNTEPAVDLYQEVLSHKD-NIIFSPGLGITVLVLEWVQLGAK 64
 Db 6 LFSLLVLSQMATGATFPEEAIALSVNMYNRLRATGEDENILFSPSLIALANGMELGAQ 65
 QY 65 GKAAQQIQTLLKQOETSAGBEEFLVLSFCSAISEKKQOETFNLANALYLQEGFTVKEQYL 124
 Db 66 GSTQKEIRHSMGYDSLKNGBEFSLKESFNMTAKESQYVMKIANSLFVQNGFHVNEEFL 125
 QY 125 HGNKEFFQSAIKLVDFODAKACAEWISTWVERKTDGKI DMFSGEERFGLTRVLVNAIY 184
 Db 126 QMKKXFNAAVNHVDFSONVAVANYINKWENNTNLLVDLSPRDFDAATYALINAVY 185
 QY 185 FKGDWKQKFRKEDTQLINFTKNGSTVKIPMMKALLRTKYGFSESSLN- ---YQVLELS 240
 Db 186 FKNWKSQFPRNTRTFSTFKDDESEVOIPMMYQQGEFFYGFSDGSEAGGIYQVLEIP 245
 QY 241 YKGEFSLIILPAEGMDIEBEVKLITAOQILKWLSEMQBEEVEISLPFRKVEQKVDK 300
 Db 246 YEGDEISMLVLSRQEVPLATLEPLVKAQLVEEWANSVKQKVEVYLPRTVEQIDLDK 305
 QY 301 VLYSLNITEIFSGCDLSGITDSSEVVSQVTKVFEINEDGSEATSTGHIPIVMSL 360
 Db 306 VLKALGITEIFKDNLTGLSDNKEIFLSKAIHKSFLVNEEGSEAAVSGMIAISMAV 365
 QY 361 AQSOFIANHPFLFMKHNPTESILFMGRVTNP 392
 Db 366 LYPQVIVDHPFFELIRNRTGTILFMGRVHP 397

RESULT 10
 US-09-722-292-2
 ; Sequence 2, Application US/09722292
 ; Patent No. 6541452
 ; GENERAL INFORMATION:
 ; APPLICANT: Hastings et al.
 ; TITLE OF INVENTION: Brain-Associated Inhibitor of Tissue-Type Plasminogen
 ; FILE REFERENCE: PF336D1
 ; CURRENT FILING DATE: 2000-11-28
 ; PRIOR APPLICATION NUMBER: 09/348,817
 ; PRIOR FILING DATE: 1999-07-08
 ; PRIOR APPLICATION NUMBER: 60/028,117
 ; PRIOR FILING DATE: 1996-10-11
 ; NUMBER OF SEQ ID NOS: 17
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 2
 ; LENGTH: 410
 ; TYPE: PRP
 ; ORGANISM: Homo sapiens
 ; FEATURE:
 ; NAME/KEY: Propep

; LOCATION: (1)..(410)
 ; NAME/KEY: signal
 ; LOCATION: (1)..(18)
 ; NAME/KEY: chain
 ; LOCATION: (19)..(410)
 US-09-722-292-2

 Query Match 39.8%; Score 791.5; DB 4; Length 410;
 Best Local Similarity 39.5%; Pred. No. 1.4e-69;
 Matches 155; Conservative 97; Mismatches 135; Indels 5; Gaps 2;

 QY 6 LWSLLLLFFGQSASRCSAQNTEPAVDLYQEVLSHKD-NIIFSPGLGITVLVLEWVQLGAK 64
 Db 6 LFSLLVLSQMATGATFPEEAIALSVNMYNRLRATGEDENILFSPSLIALANGMELGAQ 65
 QY 65 GKAAQQIQTLLKQOETSAGBEEFLVLSFCSAISEKKQOETFNLANALYLQEGFTVKEQYL 124
 Db 66 GSTQKEIRHSMGYDSLKNGBEFSLKESFNMTAKESQYVMKIANSLFVQNGFHVNEEFL 125
 QY 125 HGNKEFFQSAIKLVDFODAKACAEWISTWVERKTDGKI DMFSGEERFGLTRVLVNAIY 184
 Db 126 QMKKXFNAAVNHVDFSONVAVANYINKWENNTNLLVDLSPRDFDAATYALINAVY 185
 QY 185 FKGDWKQKFRKEDTQLINFTKNGSTVKIPMMKALLRTKYGFSESSLN- ---YQVLELS 240
 Db 186 FKNWKSQFPRNTRTFSTFKDDESEVOIPMMYQQGEFFYGFSDGSEAGGIYQVLEIP 245
 QY 241 YKGEFSLIILPAEGMDIEBEVKLITAOQILKWLSEMQBEEVEISLPFRKVEQKVDK 300
 Db 246 YEGDEISMLVLSRQEVPLATLEPLVKAQLVEEWANSVKQKVEVYLPRTVEQIDLDK 305
 QY 301 VLYSLNITEIFSGCDLSGITDSSEVVSQVTKVFEINEDGSEATSTGHIPIVMSL 360
 Db 306 VLKALGITEIFKDNLTGLSDNKEIFLSKAIHKSFLVNEEGSEAAVSGMIAISMAV 365
 QY 361 AQSOFIANHPFLFMKHNPTESILFMGRVTNP 392
 Db 366 LYPQVIVDHPFFELIRNRTGTILFMGRVHP 397

RESULT 11
 US-09-348-817A-3
 ; Sequence 3, Application US/09348817A
 ; Patent No. 6191260
 ; GENERAL INFORMATION:
 ; APPLICANT: Hastings et al.
 ; TITLE OF INVENTION: Brain-Associated Inhibitor of Tissue-Type Plasminogen
 ; FILE REFERENCE: PF336D1
 ; CURRENT FILING DATE: 1999-07-08
 ; PRIOR APPLICATION NUMBER: 08/948,997
 ; PRIOR FILING DATE: 1997-10-10
 ; PRIOR APPLICATION NUMBER: 60/028,117
 ; PRIOR FILING DATE: 1996-10-11
 ; NUMBER OF SEQ ID NOS: 17
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 3
 ; LENGTH: 410
 ; TYPE: PRP
 ; ORGANISM: Gallus gallus
 US-09-348-817A-3

Query Match 39.7%; Score 788.5; DB 3; Length 410;
 Best Local Similarity 40.0%; Pred. No. 2.8e-69;
 Matches 158; Conservative 92; Mismatches 138; Indels 7; Gaps 3;

 QY 5 FLWSLLLLFFGQSASRCSAQNTEPAVDLYQEVLSHKD-NIIFSPGLGITVLVLEWVQ 61
 Db 3 FLGLSLLVLSQMATGATFPEEAIALSVNMYNRLRATGEDENILFSPSLIALANGMEL 62
 QY 62 GAKGKAAQQIQTLLKQOETSAGBEEFLVLSFCSAISEKKQOETFNLANALYLQEGFTVKE 121

Db 63 GAHGTTLKEIRHSLGDFSLKNGEFTFLKDLSDMATTESHYVNNANSLYVQNGPHVSE 122
Qy 122 QYLGHNKEFFQSAIKLVDPQADAKACAEIWTVERKTGCKIKOMPSGEEFGELTILVLVN 181
Db 123 KFLQLVKYKFAEVENIDFSQSAVAATHINKVVENHTNNMKIDFVSSRDFSALTHVLIN 182
Qy 182 AIYFKGDKQKFRKEDTQLINFTKNGSTVKIPMMKALLRTKYGYFSESSLN----YQVL 237
Db 183 AIYFKGNWKSQFRENTRTFSTFKDDTEVQIPMMYQQGFEFFYGFSDGSEAGGIYQVL 242
Qy 238 ELSYKGDSEFSLIILPAEGMDIEVEKLITAOQILKWLSEMOBEEVEISLPRFKVEQKVD 297
Db 243 EIPYEGDEISMVLSRQEVPLVLEPLVKASLINEWANSVKQKVEVYLPRFTVEQEI 302
Qy 298 FKDVLYSLNITEIFSGCDLSGIDTSSEVVSVOTKQVFEINEDGSEATSGIHPIVI 357
Db 303 LKDVLLKGLGITEVFSRSDLTAMSDNKELYLAKAFKAFLEVNNEEGSEAAAAGMTAISR 362
Qy 358 MSLAQSQFIANHPFLFMKHNPTESILFMGRVTNP 392
Db 363 MAVLYPQVIVDHPFFFLVRNRRGTGLFMGRVMHP 397

RESULT 12
US-09-722-292-3
; Sequence 3, Application US/09722292
; Patent No. 6541452
; GENERAL INFORMATION:
; APPLICANT: Hastings et al.
; TITLE OF INVENTION: Brain-Associated Inhibitor of Tissue-Type Plasminogen
; TITLE OF INVENTION: Activator
; FILE REFERENCE: PF336D1
; CURRENT APPLICATION NUMBER: US/09/722,292
; CURRENT FILING DATE: 2000-11-28
; PRIOR APPLICATION NUMBER: 09/348,817
; PRIOR FILING DATE: 1999-07-08
; PRIOR APPLICATION NUMBER: 60/028,117
; PRIOR FILING DATE: 1996-10-11
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 3
; LENGTH: 410
; TYPE: PRT
; ORGANISM: Gallus gallus
US-09-722-292-3

Query Match 39.7%; Score 788.5; DB 4; Length 410;
Best Local Similarity 40.0%; Pred. No. 2.8e-69;
Matches 158; Conservative 92; Mismatches 138; Indels 7; Gaps 3;

Qy 5 FLWSLLLLFFGSOARCSAQKNT--EPADVLYQEVSLSHKD-NLIIFSLGITLVLEWVL 61
Db 3 FLGLSLLLVLPKAFKTNFPDETIAELSNVYNQLRAAREDENILFCPLSIATAMGIEL 62
Qy 62 GAKGAQOQRTQLKQOETSAGEEFLVKGFCSAISSEKQOFTFNALANALYLOEGFTVKE 121
Db 63 GAHGTTLKEIRHSLGDFSLKNGEFTFLKDLSDMATTESHYVNNANSLYVQNGPHVSE 122
Qy 122 QYLGHNKEFFQSAIKLVDPQADAKACAEIWTVERKTGCKIKOMFSGEEFGPILTRVLVN 181
Db 123 KFLQLVKYKFAEVENIDFSQSAVAATHINKVVENHTNNMKIDFVSSRDFSALTHVLIN 182
Qy 182 AIYFKGDKQKFRKEDTQLINFTKNGSTVKIPMMKALLRTKYGYFSESSLN----YQVL 237
Db 183 AIYFKGNWKSQFRENTRTFSTFKDDTEVQIPMMYQQGFEFFYGFSDGSEAGGIYQVL 242
Qy 238 ELSYKGDSEFSLIILPAEGMDIEVEKLITAOQILKWLSEMOBEEVEISLPRFKVEQKVD 297
Db 243 EIPYEGDEISMVLSRQEVPLVLEPLVKASLINEWANSVKQKVEVYLPRFTVEQEI 302
Qy 298 FKDVLYSLNITEIFSGCDLSGIDTSSEVVSVOTKQVFEINEDGSEATSGIHPIVI 357
Db 303 LKDVLLKGLGITEVFSRSDLTAMSDNKELYLAKAFKAFLEVNNEEGSEAAAAGMTAISR 362

Qy 358 MSLAQSQFIANHPFLFMKHNPTESILFMGRVTNP 392
Db 363 MAVLYPQVIVDHPFFFLVRNRRGTGLFMGRVMHP 397

RESULT 13
US-08-948-997-3
; Sequence 3, Application US/08948997
; Patent No. 6008020
; GENERAL INFORMATION:
; APPLICANT: HASTINGS, GREGG
; APPLICANT: COLEMAN, TIM
; APPLICANT: LAWRENCE, DANIEL
; TITLE OF INVENTION: BRAIN-ASSOCIATED INHIBITOR OF
; TITLE OF INVENTION: TISSUE-TYPE PLASMINOGEN ACTIVATOR
; NUMBER OF SEQUENCES: 17
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: HUMAN GENOME SCIENCES, INC.
; STREET: 9410 KEY WEST AVENUE
; CITY: ROCKVILLE
; STATE: MD
; COUNTRY: USA
; ZIP: 20850
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/948,997
; FILING DATE: Oct-10-97
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: A. ANDERS BROOKES
; REGISTRATION NUMBER: 36,373
; REFERENCE/DOCKET NUMBER: PF336
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (301) 309-8504
; TELEFAX: (301) 309-8512
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 407 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-948-997-3

Query Match 38.0%; Score 756; DB 3; Length 407;
Best Local Similarity 39.2%; Pred. No. 4.4e-66;
Matches 154; Conservative 90; Mismatches 143; Indels 6; Gaps 3;

Qy 5 FLWSLLLLFFGSOARCSAQKNTPEAV-DLYQEVSLSHKDNLIIFSLGITLVLEWVLGA 63
Db 3 FLGLSLLLVLPKAFKTNFPDETIAELSNVYNQLRAAREDENILFCPLSIATAMGIELGA 62
Qy 64 GKAQOQRTQLKQOETSAGEEFLVKGFCSAISSEKQOFTFNALANALYLOEGFTVKEQY 123
Db 63 HGTTLKEIRHSLGDFSLKNGEFTFLKDLSDMATTESHYVNNANSLYVQNGPHVSEKF 122
Qy 124 LHGNKEFFQSAIKLVDPQADAKACAEIWTVERKTGCKIKOMFSGEEFGPILTRVLVNAI 183
Db 123 LQLVKYKFAEVENIDFSQSAVAATHINKVVENHTNNMKIDFVSSRDFSALTH-VLIINAI 181
Qy 184 YFKGDKQKFRKEDTQLINFTKNGSTVKIPMMKALLRTKYGYFSESSLN----YQVLEL 239
Db 182 YFKGNWKSQFRENTRTFSTFKDDTEVQIPMMYQQGFEFFYGFSDGSEAGGIYQVLEI 241
Qy 240 SYKGDSEFSLIILPAEGMDIEVEKLITAOQILKWLSEMOBEEVEISLPRFKVEQKVD 299
Db 242 PYEGDEISMVLSRQEVPLVLEPLVKASLINEWANSVKQKVEVYLPRFTVEQEI 301

QY 300 DVLXSLNITELFGSGCDLSGITDSSEVYVQVTKVFFNEEDGSEATSTGIHIPVIMS 359
DB 302 DVLKGLGITEVFSRSDATJMSDNKELYLAKAFKALEVNEEGSEAAASGMIAISRM 361
QY 360 LAQSOFTIANHPFLFMKHNPTESILFMGRVTNP 392
DB 362 VLYPQVIVDHPFFELVRNRTGTFLFMGRVMP 394

RESULT 14
US-08-487-823B-2
; Sequence 2, Application US/08487823B
; Patent No. 5700924
; GENERAL INFORMATION:
; APPLICANT: Braxton, Scott M.
; APPLICANT: Diep, Dinh
; APPLICANT: Stuart, Susan G.
; TITLE OF INVENTION: NOVEL SERPIN DERIVED FROM HUMAN
; TITLE OF INVENTION: HYPOTHALAMUS
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Incyte Pharmaceuticals, Inc.
; STREET: 3174 Porter Drive
; CITY: Palo Alto
; STATE: CA
; COUNTRY: US
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSEQ Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/487,823B
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Luther, Barbara J.
; REGISTRATION NUMBER: 33,954
; REFERENCE/DOCKET NUMBER: PF-0039 US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-855-0555
; TELEFAX: 415-852-0195
; TELEX:
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 407 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-487-823B-2

Query Match 37.8%; Score 751; DB 1; Length 407;
Best Local Similarity 38.8%; Pred. No. 1.4e-65;
Matches 152; Conservative 95; Mismatches 137; Indels 8; Gaps 5;

QY 6 LWSLLLFQSGASRCSAQKNTFAVDLYQEVSLSHKD-NIIFSPGLITLVLMVQLGAK 64
DB 6 LFSLLVLSQMATGATPEEAIVDLVSNMYNRLRATGEDENILFSPISIALANGMELGAK 65

QY 65 GRAQQOIRQTLKQOETSAGEEFLVLSKPCSASEKQEFNFANALYLOEGFTVKEQYL 124
DB 66 GSTQKEIRSMGVDSUKNGEEFSFLKEFNSMWTAKESQYVMKIANSLFVQNGFHYNEEFL 125

QY 125 HGNKEFFQSAIKLVDFQDACAEMISITWVERKTGKIDMFSGEBFGPLRLVLVNAIY 184
DB 126 QMMKYFNAAVNHVDFSONVAVNYINKWENNTNVLKDLVSPDFXAATYALINAVY 185

QY 185 FKGDWKQKFEKEDTQTLNFTKNGSTVTPMKALLRTKYGFSESSLN----YQVLELS 240

DB 186 FKGNNKSFRENTFTFSTKDDSEVOQIPMYOQGEFYGFSDGSGNEAGGIYQVLEIP 245
QY 241 YKGDFEFSIIILIPAGMDIEEVEKLIITAQQLIKWLSEMQEVEEISLPFRKVKQKVDPKD 300
DB 246 YEGDRIISMVLVSRQEVPLATLEPLVKAQLVEEWANSVKKQKVEVYLPFRFTVEQEDLDK 305
QY 301 VLYSLNITEIFSGGCDLSGITDSSEVYVQVTKVFFNEEDGSEATSTGIHIPVIMS 360
DB 306 VLKALGITEIFI-KIKFDSLSDNKEIFLSKAHKSFLVNEEGSELSYS-GM-IQLVGGC 362
QY 361 AQSOFTIANHPFLFMKHNPTESILFMGRVTNP 392
DB 363 LYPQVIVDHPFFELVRNRTGTFLFMGRVMP 394

RESULT 15
US-08-997-040-2
; Sequence 2, Application US/08997040
; Patent No. 5929210
; GENERAL INFORMATION:
; APPLICANT: Braxton, Scott M.
; APPLICANT: Diep, Dinh
; APPLICANT: Stuart, Susan G.
; TITLE OF INVENTION: NOVEL SERPIN DERIVED FROM HUMAN
; TITLE OF INVENTION: HYPOTHALAMUS
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Incyte Pharmaceuticals, Inc.
; STREET: 3174 Porter Drive
; CITY: Palo Alto
; STATE: CA
; COUNTRY: US
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSEQ Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/997,040
; FILING DATE:
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/487,823
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Luther, Barbara J.
; REGISTRATION NUMBER: 33,954
; REFERENCE/DOCKET NUMBER: PF-0039 US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-855-0555
; TELEFAX: 415-852-0195
; TELEX:
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 407 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-997-040-2

Query Match 37.8%; Score 751; DB 2; Length 407;
Best Local Similarity 38.8%; Pred. No. 1.4e-65;
Matches 152; Conservative 95; Mismatches 137; Indels 8; Gaps 5;

QY 6 LWSLLLFQSGASRCSAQKNTFAVDLYQEVSLSHKD-NIIFSPGLITLVLMVQLGAK 64
DB 6 LFSLLVLSQMATGATPEEAIVDLVSNMYNRLRATGEDENILFSPISIALANGMELGAK 65

QY 65 GRAQQOIRQTLKQOETSAGEEFLVLSKPCSASEKQEFNFANALYLOEGFTVKEQYL 124

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Db      66  GSTQKEIRHSMGYDSLXNGEESFLKEFSNMVTAKESQYVMKIANSLFVQNGFHVNEEFL 125
QY      125  HGKKEFFOSAIKLVDFOCAKACAEIMISTWVERKTDGKIKDMFSGEEFGPLTRLVLVNAIY 184
Db      126  QMKKKYFNAAVNHVDFSONVAVANYINKWVNNNTNNLVKDLVSPRDXAATYALALINAVY 185
QY      185  FKGEWKQKFRKEDTQOLINFTKNGSTVKIPMMKALLRTKYGYPSSSLN----YQVLELS 240
Db      186  FKGNWKSQFRPENTRTFSFTKDDSEVQIPMMYQGEFYGFSDGSNEAGGIYQVLEIF 245
QY      241  YKGDEFSLIILPAEGMDIEEVEKLITAOQILKWLSEMGEVEEISLPRFKVEOKVDYD 300
Db      246  YEGDEISMVLVLSRQEVPLATLEPLVKAQLVEEWANSVKQKVEVYLPRTVEQEIIDLKD 305
QY      301  VLXSLNITEIFSGGCDLSGTDSEVYVSQVTKVFFNEINEDGSEAAATSTGIHIPVIMSL 360
Db      306  VLKALGITEIFI-KIKFDSLSDNKEIFLSKAIHKSFLVNEEGSELVS-GM-IQLVGCC 362
QY      361  AQSQFIANHPFLPMKHNPTESILFMGRVTNP 392
Db      363  LYPQVIVDHPFFFLIRNRTGTILFMGRVNH 394

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Search completed: October 21, 2004, 06:46:59
 Job time : 41 secs

